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THE SOUTHERN DENTAL JOURNAL.

CONSOLIDATED IN 1893

A MONTHLY JOURNAL DEVOTED TO THE INTERESTS.

OF THE PROFESSION.

H. HERBERT JOHNSON, D. D. S., EDITOR.

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Southern Dental Journal

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No. 1.

DIFFERENCES IN MEDICAL AND DENTAL THE-RAPEUTICS THAT CAUSE FRICTION, AND SUGGESTIONS TO HARMONIZE THEM.

BY DR. C. B. COLSON, CHARLESTON, S. C.

In presenting this subject to you, I feel that I must be most careful, as it is delicate; for one of the principal points I wish to present is a matter of difference now causing friction between the doctor of medicine and the dental surgeon. For I do not care to offend either side in the discussion.

At no time in the past has the dental profession held such promising acknowledgement and respect as now by the medical fraternity. We are not wholly a happy family yet, and recognized generally as a specialty of medicine. But I must admit we are fast forcing the recognition by the best of arguments—education and skill. The medical man is forced to see his equal in the sciences in the dental surgeon through all their associations.

To-day we are fast getting harmonious. It is no uncommon thing for one of us to be called into consultation with the M. D., or the dentist to consult with the family physician in diagnosing a condition or correcting a constitutional trouble that is accessory of a dental injury. But now, as the harmony is getting so general among the highly educated practitioners of both professions, there are many little conditions where our treatment for the same trouble is directly the opposite; and also many of the drugs and chemicals

^{*}Read before the Southern Dental Association at Morehead City, August, 1891.

administered that do our patients' dental organs injury and destroy our work of art put there by great labor and expense.

There has been little done in the past to harmonize the ideas of the two professions, and I fear it has been the cause of most unethical conditions.

To convey my meaning more explicitly. I will give an instance—the manner you have acted or the way you have expressed yourself when a worthy patient appears in your chair with her face having been poulticed from the outside for a week for swelling caused by an inflamed root—the abscess pointing and about to break through on the face. You ask, why did you poultice your face, and you get the answer that the family physician advised the poultice.

We are meeting these conditions frequently, but nothing generally has been done by dentists to make it less common; the general custom is, I fear, to use expletives and discourse to your patient on the monumental ignorance, and destroy the patient's faith in her good old family doctor, who returns the compliment with interest when you are trying zealously to save a suppurating root or tooth—for a crown or bridge. The family doctor orders it out, and advises the patient to go somewhere else and have it out. There are several medical preparations, drugs and chemicals that are administered by the medical fraternity that are injurious to the teeth directly and indirectly, with a degree of carelessness that is astounding in this great enlightened dental age. This is very common, and nothing new, for it has been the source of dental troubles for many years. The dentist has done nothing to harmonize the ideas of the physician with his, and stop the condition, and the usual aforesaid expletives, etc., at the chair to the patient have injured us and done the subject no good. We dentists have done little or nothing to stop this unfortunate condition. Our text books have little on the subject, our literature is silent, and the subject has raceived very poor attention; but it exists—it is a serious trouble some of us may disagree as to its degree of injury, but I feel sure of every old family dentist agreeing with me, that it is time for dentistry to call a halt, and I hope if you do me the honor to discuss this paper, you will suggest some way to advance it better than I here present it.

Before writing this paper, I canvassed around among several well-known and some celebrated medical practitioners, to get their views on the subject. They were all intelligent and thoroughly scientific medical men. I will here present the interviews of four of them; I think it will interest you. To my question as to the manner of prescribing acids, such as mu. tinct. of iron, or chloride of iron, sulphuric acid cetic, what precautions do they recommend to prevent injury to the dental structures, Dr. A. said, "I am glad you asked me that question, for of later years I almost daily have the request when prescribing, 'Please, doctor, do not give me anything that will injure my teeth.' I presume you dentists have cautioned them, and when I give iron or the acids I always advise the glass tube."

In answer to the same question, Dr. B. said, "Look here, is there not much of a myth about this iron and acids medications injuring the teeth? I have believed it so anyway for some time; can't say that I ever give any precaution."

Dr. C.—"Oh yes; I tell them to use lime water after taking the iron, but really have no positive knowledge of injury having been done to the teeth beyond putting them on edge."

Now, lastly, Dr. D., in answer to this question, said, "Dear Dr., your question is timely, and I am glad you have come to me, for I was accused directly to-day by one of my young lady patients of being the cause of the loss of her teeth, by administering iron while she was in an anemic state. Her dentist had told her the acid in the iron had played havoc, but I feel the anemiated condition was the true cause of her dental troubles. But since you ask the question, I will say I have used very little precaution; in fact, I don't know what drugs are most injurious to the teeth, but I am There is nothing in our standard books of refer-In the literature of our magazines or journals there is nothing relative to the subject. There may be in your dental journals, but we don't read them. You dentists should demand recognition in our medical societies and there bring your essays, as do the oculists, aurists and other specialists. Also, get your essays and articles into medical journals, especially on those subjects that relate to the practice in both professions. I am sure this subject is important enough to be taught in primary medicine in our colleges, yet I doubt if there is ever a word said in any college on the subject."

Now, brother dentists, Dr. D's suggestions are very wise. We see the trouble and find the injury done, and it is time this should be most generally announced—forcibly, not in any manner to cause prejudice by eulogizing on the ignorance of the M. D., for I fear there may be some dentists that are equally as ignorant or care less on this particular subject. But for the good of our patients, our duty to ourselves, by protecting the work of art and labor that we place in their mouths, for when it fails our reputation also suffers, although we had been conscientious, and the work the most perfect of its kind.

The first of these preparations I will mention is iron—tincture chloride of iron-commonly called muriate tincture of This particular preparation has had a bad name for a long time. The instant its name is announced in a family, visions of bad teeth and dental bills loom up. It is a valuable medicinal agent, and not one easily put aside for something just as good and less injurious. The chloride of iron has a tonic effect second to no other preparation, and its popularity among the medical fraternity appears to be on the This preparation is more often administered to the patient while in an anemated condition—the very time when the teeth have less protection to resist, as the saliva is invariably acid during anemia. The old way of administering it through a tube is poor, as invariably sufficient acid finds its way into the mouth to do injury. It is more often given in a spoon or wine-glass, and when given this way in water, it gets in its injurious work, doing more harm when diluted than pure. It has been the usual custom to advise the use of lime water immediately after taking the iron. Those physicians who make any pretences when prescribing iron advise it, and I believe it is most generally advised by the dental profession, but lime water is positively no good, and does not prevent the trouble; it cannot be mixed with the tincture as it would destroy it, and it does not prevent the free acid from acting on the teeth, and if it did, and was administered after the iron it would be too late, as the action is instantaneous. Now we really have as an antidote for this preparation any of the alkaline carborated waters; the best is Vichy, next Seltzer. The tincture of chloride of iron can be added to the Vichy, and instead of being impaired it improves it and entirely protects the teeth.

Dr. George W. Weld read before the New York Odontological Society last May a most admirable paper on this preparation. In it Dr. Weld said, "I have discovered, however, that this astringent and acid preparation can be administered in Vichy or any other similar alkaline water, without the slightest ill consequences to the teeth; and that the iron when so administered becomes, by the elimination of the free hydrochloric acid, a stronger restorative agent and is more likely to be assimilated and tolerated by a week stomach."

I have been using Vichy in this way for the last ten years. The information I received from a French medical work, and I understand that it is the common custom in France to use this water from the great French spring as the medium to administer the iron tincture. Therefore, I will not admit Dr. Weld the discovery, although he has written a most valuable paper on the subject, and I advise you all who are interested in the subject to procure the paper and read it.

Now, what I recommend as the best mode, and what we should strive to get the physicians to prescribe with the preparation, and the druggist to place on the label "this preparation is injurious to the teeth, unless taken with Vichy or Seltzer water." A bottle of French Vichy costs 50 cents. Shortly after it is opened it loses its carbonic gas, a very important property, as this gas helps to hold the chloride of iron in solution, preventing the alkaline salts from acting on the iron and changing its condition, and again, as Dr. Weld asserts, assists in a mechanical way, and which can be easily demonstrated, as the teeth placed in Vichy and tincture of chloride of iron become completely covered with innumerable bubbles and prevent the contact of any free acid.

I find and advise as the best, the most practical and most economical way to use this medium and antidote is to use the salts of Vichy. It is for sale in all first-class drug stores. A quarter of a teaspoonful in three ounces of water, and you have the sure medium for your iron and a preservative for the teeth.

To those of you who are interested, it would be well to assure yourselves of this fact. Purchase a small quantity of artificial salts of Vichy and experiment and see the difference between its effect and lime water.

The other acid used most frequently in medicine is Sulphuric, usually in the form of the Aromatic Sulphuric Acid. This acid is far more injurious than the Hydrochloric to the teeth.

Sulphuric acid is the greatest dissolver of lime, and its effect is quicker and greater than Hydrochloric, as it is all free acid and its natural fondness for lime salt.

I admit, it has not the bad name of the Iron Chloride, for, instead of forming black nodules on the teeth, it bleaches them and makes them beautifully white. perfectly terrible to see the effects of this acid when given any length of time. No medium is even given with it to counteract its effects, and it is seldom credited with the destruction it causes, by the patient and not always by the dentist. This acid always has its effect on the teeth be it ever so dilute. 1 in 1,000 parts of water shows an action on the enamel of a tooth immersed one minute. The best remedy I can find to advise for this is lime water; (Vichy will not do.) Not in the old way of taking the lime water after the acid has attacked the teeth. Advise the patient to first rinse out the mouth with pure lime water; then take the acid through a glass tube and immediately rinse out again with lime water, then with plain drinking water. By no means place the acid in the lime water, as you destroy. the medical properties of it and make the dose useless.

Acetic acid is the only other acid I would mention that is generally used in medical preparations. It is not very generally used now as a medicine, but enormous quantities are consumed in beverages. Its action is not as powerful as Hydrochloric or Sulphuric acid, but as it is used so commonly I am positive it really does more harm to the general public than the other two. Every soda fount, so called, where carborated beverages are dispensed daily, gives to our patients enormous quantities of this acid. All fruit syrups—lemon, pine apple, raspberry, orange, etc., contain a large quantity of pure acetic acid. Although these syrups

are made of the fruits, the makers find that by adding acetic acid it brings out the taste of the fruit more, and is thereby a source of economy. My attention was first called to this by noticing that my teeth always felt rough and on edge after taking a carborated fruit syrup. I then investigated and experimented, to find that a few minutes immersion of a tooth in this syrup gave a very perceptible change to the enamel.

I have two young men makers and therefore constant tasters of these syrups, that I despair of keeping their teeth in order; in each one every approximate surface is filled and every suture has a fissure filling, and the marginal edges waste away continually. Not only are these syrups injurious, but you will find this acid in the carborated lemon sodas, and also the elegant fruit syrup now becoming so popular for domestic use.

I cannot close this paper without returning once more to the medical profession and their doses that play havoc with the teeth, and say a few words on calomel, but must leave you to find an antidote. It amazes me how you old dentists, pioneers, patriarchs and fathers of our profession ptyalise and salivate your patients with so little protest; even to this age, when enlightened medical science seldom is forced to poison the system with this drug, we make but little protest. I believe we Southern dentists have more of this trouble, as calomel is used more down here. But our medical brethren think nothing of the teeth, and in fact are perfectly unconscious of it, as they do not believe they do any permanent injury to the teeth, when they purposely give Calomel to ptyalise, or carelessly allows salivation to take place; or, as is said of an old Georgia physician, who, when he gave calomel for malaria always watched the gums of his patients, and told them that when they saw that "little yellow stuff squeeze out, he was certain that his mercury had took."

Brother dentists, I believe the slightest ptyalise does a fearful injury and shortens the years many that a patient will have their natural teeth. Of complete salivation I will not say anything. You have all seen it, and possibly some of you are using porcelain now from the effects of it, but

ptyalise, as the M. D. chooses to call the first and light stages of mercurial poison in the blood, invariably causes the thin edges of the alveola process around the neck of the tooth to suppurate. These edges are very thin, but they give a great support to a tooth, on the four lower central incisors it is very thin for some distance along the root of these teeth and it is rare that these teeth ever become firm and useful after the course of mercurial ptyalise, as this thin process never returns or is deposited once it suppurates.

The enormous amounts of potash and strong alkali preparations, too, need our investigation, as they no doubt have their injurious effect—directly or indirectly— for we have several diseases of the dental organs, such as pyorrhea, alveolaris, salivary, calculus, etc., of the causes of which we know as yet positively nothing.

Now, what are we going to do about all this? Let it go on? It's money in your pockets. If these conditions cause your work to fail it can't hurt your reputation much as you have the last inning with the patient, and can put all the blame on the M. D.

The Southern Dental Association at its last meeting discussed and passed a unanimous resolution and appropriated money to educate the people to the true appreciation of dental science. Now, can we not do something this year to educate the medical profession, or, I should say, enlighten them on Dental Therapeutics. We are the ones to find and see the faults or bad effects; we are also injured; it is our duty and in the power of our grand profession to find out the remedies to counteract these conditions and demand their use.

Every medical man wants this information. I have given you but a poor array of antidotes; we all must must investigate and make known the conclusions we find. The people must and will be enlightened to the good in dental science, and they will demand to be protected from these chemicals and drugs, and then soon all will fall in line.

There are many other points in which medical therapeutics and dental knowledge need to be harmonized.

The hot ashes and salt bag poultice for toothache is still common in the land that abounds with dentists. The dis-

figurements it has caused can be seen daily and hourly on the streets. The medical practitioner prescribes hot meal or bread poultice; making fearful facial abscesses, leaving ugly scars and fistutous openings in the cheek and nose.

Southern dentists, write your ideas and essays, and send some of them to medical journals; they will gladly give them space; and when you write of such subjects as I have here and get them published there, you will do more good than I have done here in telling you much that you knew before.

Editor Southern Dental Journal :-

Please allow space in your valuable publication for a correction, which should have been made long ago, but in the confusion of things when the JOURNAL changed editors, was overlooked.

I have sent you a most excellent paper, (which I hope has obtained space in this issue) written by Dr. C. B. Colson of Charleston, S. C., and read before the Southern Dental Association by Dr. Patrick of Charleston, at Moorehead city, in 1891.

There seems to have arisen some doubts in the minds of some of the members, at the time, as to whether the paper was original, they being of the opinion that it, or a portion of it, had been published or read at some previous time. It was, therefore, decided that the paper should not be allowed as a part of the proceedings unless these objections could be proven without foundation.

Dr. Colson asked me to kindly assist him in setting himself right before the association and the profession, which I proceeded to do, and had not myself discovered the omission of the proper explanation which was sent in and should have appeared in the last Nos. of the 1891 volume, but which, in some way, become lost by the carelessness of the printers.

The objections to the paper were without foundation, and due and timely apologies were made by those who brought the charge against it.

The paper is a most excellent one, and while I am sorry it did not appear in the proceedings, as it should have done, I hope it will be read with equal interest even at this late date,

and the profession will profit by the thoughts which it contains.

Dr. Colson is a working and contributing member of the Southern Dental Association, and I am glad thus to be able to set him right.

Thanking you for your space, I am, Fraternally yours,

H. H. Johnson.

P. S.—I wish for the JOURNAL and its editor a happy and prosperous New Year.

J.

Selections.

ASBESTOS FIBER IN ROOT-CANAL TREATMENT.

The use of liquid or semi-fluid substances for root-canal dressings or fillings is rendered extremely difficult in the superior teeth without the assistance of some fibrous material which acts as a carrier or vehicle to overcome the effect of gravitation, and so secure the placing of the dressing fully to the apex. Cotton wool, silk, or lamb's wool, and in fact all of the fibers used in this connection, present the uniform objection of inviting the absorption of secretions through their porosity, and by reason of their organic origin of developing a tendency to putrefactive changes with resulting irritating effects on the pericemental membrane. For the past two years I have used with much satisfaction for the purpose under consideration, a long-fiber Canadian abestos, which is to be had from the dealers in abestos materials. should be obtained in its native condition as rock abestos. not separated into the fine woolly condition by the mechanical processes used in preparing it for commercial purposes. The best variety occurs in irregular masses, deep emerald green in color, with a fine striated structure in which the fibers are in bundles from one-half to two inches in length. For use in pulp-canals, the fiber is readily obtained from such a mass by holding it in the left hand and rubbing off a sufficient quantity in a fine silky condition by using the ball

of the right thumb applied at right angles to the length of the firous mass. By rubbing it in this manner for a short time a flock of extremely fine fiber will be obtained, which can be twisted into a suitable wisp, having great tensile strength and a certain rigidity which enables one to readily carry it, even when moistened with a medicament, to the apex of the canal. The material described has certain marked advantages over any other fibrous material in common use for the purpose—viz, it is inorganic and undecomposable by any of the substances ordinarily used for pulpcanal treatment; it is unaffected by the ferment agents there present; it is by reason of its non-combustible character readily and instantly sterilized by passing it through an alcohol flame and heating it to redness; it makes a suitable and unalterable vehicle for the application of tincture of iodin, potassium permanganate, nitrate of silver, sulphuric acid, or any of the agents which disintegrate cotton or wool fiber, as these are prone to do when used in concentrated solution. Further, it makes a most excellent vehicle in connection with oxychlorid of zinc, chloro-percha, or paraffin as a permanent and unalterable root-filling material.—Edward C. Kirk in Cosmos.

CHEST DEVELOPMENT vs. CONSUMPTION.

I believe that a good chest development and its usual concomitant, the habit of deep and full breathing, constitutes the best possible safeguard against all diseases of the lungs. In ordinary respiration the lungs are not exercised nearly up to their fullest and best capacity, many of the air cells being but partially expanded, and many others, perhaps, not expanded at all. Any organ of the animal economy that is not maintained in a fair state of functional activity, is more apt to become diseased or to to suffer derangement than one that is habitually exercised; and the same is probably true of each individual molecular member of every particular part.

It is in the power of every one to increase his or her chest capacity. The marvelous little air cells of the lungs need an occasional expansion more full and thorough than they get in ordinary breathing. The average adult breathes sev-

enteen times a minute. Persons who have paid attention to the development of their chests often breath only thirteen times per minute, and yet the one takes in just as much oxygen in a given time as the other. In the one case the lungs are more fully expanded than the other, and a large number of individual cells are put into healthful exercise, and are consequently less liable to become diseased.

A good practice is to take deep inspirations while raising the arms above the head. Do this a dozen times soon after rising in the morning. Another, and I think a much excellent plan, is to walk at a brisk pace in the open air, taking in the breath during the time occupied in making five or six steps, and occupying the same length of time in expiration. Keep the mouth closed, and breathe only through the nose. The air is thus warmed before it reaches the lungs. Man is the only animal ever stupid enough to breathe through the mouth, and is the only one capable of reading and comprehending the language, "Into man's nostrils God breathed the breath of life."

Learn to use some of your reserve lung-power in the ordinary act of respiration, and your respiratory organs will not fall so easy a prey to baccillus of pneumonia and of tuberculosis.— John J. Thomas, M. D., in Annals of Hygiene.

STOP SPITTING.

The modern gospel of prophylaxis teaces that phthisis can be abolished from the face of the earth if only people will stop spitting. Says Dr. T. M. Prudden:

"If the vile and increasing practice of well-high indiscriminate spitting goes on unchecked in nearly all assembling places and public conveyance; if the misguided women who trail their skirts through the unspeakable and infectious filth of the street are to be admitted uncleansed into houses and churches and theaters; if theaters and court-rooms and school-houses and cars are to remain the filthy lurking-places of contagia which their ill ventilation and their mostly ignorant and careless so-called cleaning necessarily entail; if in sleeping-cars and hotel bed-rooms the well are to follow consumptives in their occupancy without warning, or even the

poor show of official disinfection; if in ill-ventilated and ill-cared-for dwellings the well must breathe again and again the dust-borne seeds of tuberculosis; if no persistent warning is to be given to the ignorant of the dangers which lurk in uncleanliness—then our task will be most complex as well as difficult in limiting the contagiousness of tuberculosis."

Of course cleanliness and plenty of water are necessary; but, after all, it is the expectoration which carries the germ and promotes the spread of disease. Spitting, it seems, is not only a vile, but an increasing habit. This is an unfortunate social fact which reformers do not seem to have grasped, despite its noxiousness. Shall we not have to have a society for the prevention of expectoration—except into sanitary spit-cups? If one could stop the spitting habit, prevent the spread of consumption, and finally stamp it out, he would be greater than a tariff reformer.—Medical Record.

BUGS AND TUBERCULOSIS.

The pathologist is in no danger of having to weep, like Alexander, for the want of fresh worlds to conquer. Almost every day some new microscopic feræ naturæ are tracked to their lairs, but the hydra of the fable is as nothing compared with the too-real bacillus. The scientific Herakles no sooner crushes one head than others spring up to mock his labour. The germs of disease lurk everywhere around us, and even the "poor relations" who minister to our use prove their kinship by communicating to us their diseases. The cow gives us tubercle, the horse tetanus and glanders, the dog hydrophobia, and the "harmless necessary" cat diphtheria. A French authority has recently expressed the belief that domestic pets carry at least thirty per cent. of the ordinary contagious diseases from house to house. Now another French physician, M. Dewevre, has flashed his "bull's eye" on a previously unsuspected criminal by tracing the transmission of tuberculosis to the bug. One might have thought that that genius loci of the seaside lodging-house had already enough to answer for in respect of what the lawyers call "malice against the human race," without this additional indictment. M. Dewevre states the case for the prosecution

as follows: Some eighteen months ago he had under his care a young man aged 24, suffering from tuberculous bronchitis. The patient for several months lived in the same room, and slept in the same bed as a brother who had died of phthisis the year before. The room had not been disinfected, and in the absence of hereditary taint M. Dewevre attributed the development of tubercle in his patient to contagion. He had the room thoroughly disinfected, and the patient isolated—a precaution, he adds, all the more necessary that a younger brother aged 18 shared the bed with On the patient's death, five months later, both the room and bedding were carefully disinfected; but in spite of this, within eight months of the man's death, the surviving brother was found to be in the first stage of phthisis. weeks before this discovery was made the lad's lungs had been examined, and found perfectly healthy. Dr. Dewevre was puzzled to account for the origin of the disease; but noticing that the patient's body was covered with bug-bites, it occurred to him that the infection might have been conveved by these insects. As a matter of fact, though everything else had been disinfected, the wooden bedstead itself had been left, scientifically speaking, unhouselled, unanointed unanealed. Some thirty bugs were forthwith impounded, and were used to inoculate three guinea-pigs, all of which quickly died of tuberculosis, as was proved by post-mortem examination. Further experiments with the "diluted and filtered pulp," obtained by crushing fifty insects, yielded "magnificent cultures" of intense virulence. It was found that 60 per cent. of the bugs in the bedstead contained tubercle bacilli. M. Dewevre, therefore, urges that among other possible lurking-places of that dreaded microbe, the bug should not be forgotten. On the whole, although it is no more impossible a priori that the bug may be the medium of transmitting tuberculosis than that the itch acarus may convey the infection of leprosy (instances of which are given by Dr. Thin in his work on that disease), the case against the cimex lectularius must, in the particular instance adduced by Dr. Dewevre, be dismissed as "not proven." If his reasoning is not altogether convincing, however, his facts are certainly suggestive; and, if they do more, they furnish an additional plea for cleanliness, which, unlike the law, curat de minimis.—British Medical Journal.

DISSOLVING DEAD BONE BY MEANS OF ACIDS AND FERMENTS has given a sufficient number of good results to make its use by the profession more general.

The best formula for this purpose is the following:

Pure scale Pepsin, 3 ss.
Nitro-muriatic acid, 3 i.
Distilled water, Oi.

M. Inject two drachms into the sinus so that it will come in contact with the dead bone twice a day.

The sinuses should be prepared for this dissolving solution by being carefully washed out with a half-strength solution of peroxide of hydrogen. If the finger of the operator is held over the sinus after the acid solution is injected the fluid can be retained for some minutes without causing much pain.—Ex.

Countryman (to dentist): "The tooth next to that 'un aches, too, Doc." Dentist: "Yes, it aches in sympathy." Countryman: "Yank it out, durn sich sympathy!"

An aristocratic young woman of New York has sued a prominent dentist for \$5,000 for the unskillful extraction of a molar. The tooth was in court, and it is said that its exhibition much affected the jury.—Ex.

FIRST PERMANENT MOLAR.—I believe these teeth to be more susceptible to thermal changes when metalic fillings are used, than any other teeth. I have found it so, at least, and as before said have lined the larger cavities with the oxyphosphates. I believe the pulps of these teeth are more susceptible and more tender, in the first few years after their eruption than in any of the other teeth. When these teeth (particularly in the first two, possibly three years after their eruption) are studied histologically, and their nature and resources are well understood, the universal verdict will be, that when taken in time and properly watched, it will be the fault of the dentist, and not the teeth, if in most cases they cannot be saved.—Dr. J. H. Wolley, Review.

To Solder Aluminum.—Messrs. F. J. Page & H. A. Anderson of Waterbury, Connecticut, claim that surfaces of aluminum may be successfully soldered to each other, and to other metallic surfaces, by using silver chloride as a flux in eonjunction with ordinary solder.

The pieces of metal, one or both of which are aluminium, are placed in the relative position required in the joint, finely powdered fused silver chloride spread along the line of conjunction, and solder melted on with a blow-pipe or other device. The joints are thus easily and rapidly obtained, and become hard and perfectly sound on setting, and neither crack, flake, nor check.—Items of Interest.

SO THE WORLD GOES.

Laugh, and the world laughs with you;
Weep, and you weep alone,
For this brave old earth must borrow its mirth.
It has trouble enough of its own.
Sing, and the hills will answer;
Sigh! It is lost on the air;
The echoes bound to a joyful sound,
But shrink from a voicing care.

Rejoice, and men will seek you;

Grieve, and they turn and go;
They want full measure of all your pleasure,
But they do not want your woe.
Be glad, and your friends are many;
Be sad and you lose them all;
There are none to decline your nectared wine,
But alone you must drink life's gall.

Feast, and your halls are crowded;
Fast, and the world goes by;
Succeed and give, and it helps you live,
But no man can help you die.
There is rooms in the halls of pleasure
For a long and lordly train,
But one by one we must all file on,
Through the narrow aisles of pain.

JOHN A. JOYCE.

REPLY TO "YOUNG DENTIST" IN FEBRUARY ITEMS .-- I have been using the formula you quote for painless extraction of teeth continuously, since it first appeared in the Items.* Have never known of a case of swelling to follow its use. inject from one to three drops right where I expect the beaks of forceps to press the gums. The removal of a tooth will hurt some in almost every case, but there will be no pain in grasping the tooth well up to the process, and no unpleasant results will follow. I have been using cocaine preparations in this way for a year and a half, and my success at removing badly decayed teeth and broken down roots, have eclipsed all former efforts. The hypodermic needle, as it comes to us, is not properly pointed for this purpose. The taper at the point is so long that too much pain is caused by entering the gum far enough to confine the fluid. I grind down close to opening to the finest possible point. Should the needle become clogged, unscrew it, fill your syringe with water, replace the needle, and forcibly eject the water.—Old Dentist.

*The formula referred to is:

Cocaine hydrochlorate	20 grains.
Sul. atropia	. 1-10 grains.
Car. acid crystal	. 10 grains.
Chloral hydrate	. 5 grains.
Water	. 1 ounce.
—Off	ce and Laboratory

HOW TO OBTAIN AN EXACT IMPRESSION OF ROOT-CANALS.

BY EDWARD G. CARTER, L.D.S., ENG. AND GLAS,

- 1. Shape the canal.
- 2. Mop it out with glycerine.
- 3. Fill it with pink gutta-percha—the kind supplied for taking impressions.
- 4. Heat a small French nail, press it into the canal, and leave the head projecting.
- 5. Take impression with modeling composition, and the gutta-percha will come away on the pin, thus enabling one to

make a pivot with a maximum thickness of pin and a minimum quantity of cement.

The root should be roughened just before inserting the pivot.—Office and Laboratory.

DEATH FROM ALVEOLAR ABSCESS.

Although fortunately of rare occurrence, it is well to bear in mind the possibility of a fatal issue in cases of alveolar From time to time instances are recorded where pyæmia is caused by absorption of septic material from the socket, and the treatment adopted by Mr. W. A. Lane, in a case reported in the Lancet, is worthy of notice. A child of four years had an abscess in connection with a second temporary molar, which was removed, and the cavity was thororughly cleaned out under an anæsthetic. The abscess had previously opened into the mouth, but there was much diffused swelling over the left half of the lower jaw. The boy became jaundiced and suffered from recurring rigors for four It was then decided to make an attempt to stay the progress of the condition by excising any thrombosed veins and clearing out inflamed tissues. The external jugular vein, which contained purulent material, and the facial vein, with their thrombosed branches, and many inflamed lymphatic glands, were removed. The patient was better the next day, but ultimately died, and at the post-mortem examination a number of abscesses were found in the lungs and liver, produced before the operation.—British Journal of Dental Science.

FIRST AND SECOND MOLARS.—My study of the comparative liability of the teeth to decay at the different periods of life, shows that the first molars are attacked in the first two or three years after eruption, much oftener than any other tooth. But in after years they are attacked less often than the second. If both the teeth are in a fair condition at the age of fifteen, the chances for the first are better than those of the second. Decay occurs on the surface of the second molar much oftener than in the same locality in the first, and is much more difficult to treat.—Dr. G. V. Black.



DEATH UNDER PENTAL.—The death of a German operasinger is reported by the *British Medical Journal*, July 9, 1892, to have recently occurred after the administration of pental for the extraction of a tooth. Eight or ten drops were given upon a face-piece and the tooth removed, where-upon the patient fell back with a loud shriek and never recovered consciousness, attempts to restore animation proving of no avail. The official examination showed that the brain, lungs and vessels were healthy. There was, however, some amount of fatty degeneration of the heart, and death was attributed to syncope, probably due to the condition of that organ.

ROOT CANAL CLEANSER.—We have received from Messrs. Weist and Schwarz of Vienna, a preparation for removing the decayed matter in the root canals of teeth. It is introduced by Dr. Emil Schreier, who states that it is composed of potassium and sodium, and that it acts upon the decayed matter in a root by decomposing it. It produces a high temperature during the process, and effervesces, transforming the contents of the root canal into a soapy mass, which is easily removed, at the same time it renders the canal proof against the cultivation of new germs. It is applied with a canal cleanser, and the operation is to be repeated until no further chemical action takes place. Dr. Schreier states that after this preparation has been applied to the canal it is immaterial whether any particles of matter remain, as they are rendered harmless. He cautions dentists against the too frequent use of the same cleanser, as the preparation acts upon the steel and is liable to make it brittle. Air decomposes the material, but the oxidation is confined to the surface only; he recommends that the cork shall be pushed down on to the preparation each time after using: the bottles are made without necks for this purpose.—Dental Record.

The Chicago Tooth Saving College has changed its name to the Columbian Dental College.—Good Idea.

Dr. J. B. Patrick of Charleston, S. C., one of the Vice-Presidents of the Columbian Dental Congress, has been confined to his bed as the result of an accident. "George F. Green died at Kalamazoo, Mich., in June, 1892, aged sixty years. He invented the first self-binder, first electric street car and pneumatic shutter for photographers. He was working on an electric device to take the place of trolly wires at the time of his death, and constant thought on the device probably accelerated his death."—Daily paper.

A fact, which seems to have been overlooked by the dental and secular journals, is that he was the inventor of the first dental engine or Green's Pneumatic Drill. We first saw one in 1868 or 1869 in the office of Prof. Taft, Cincinnati. The drill arm or shaft was rotated by a fan-wheel at the top of the standard, supplied with air from a foot bellows at the base. The drill was very noisy and was soon superseded by the Morrison engine, when the latter appeared about a year later.—W. H. S. in Ohio Journal.

At Bogota, which is situated nearly under the equator, and has an altitude 9,000 feet, consumption and pneumonia are unknown. The winter temperature is 59 degrees F., and the spring and summer 59-5 degrees. Dr. Remondino, in his recent work on the "Mediterranean Shores of America," says that at Jauja, in Peru, 79 per cent, of all cases of consumption are cured. The altitude of this place is 8,000 feet above the sea level, and the temperature is between 50 and 60 degrees F.—Texas Sanitarian.

MOUTH HYGIENE.—Stark (Journal fur Zahnheilkunde, October 23, 1892) lays down the following rules for hygiene of the mouth during epidemics. 1. Sterilize the mouth with permanganate of potassium before each meal. 2. Prevent foci of putrefaction by having the teeth repeatedly cared for by a dentist. 3. The use of sterilized water as mouth wash in the dentist's operating room.

Women Members B. M. S.—At the late meeting of the British Medical Society, just closed, women were, by resolution adopted admitted to membership.

[&]quot;Do as I Say, Not as I Do."—Doctor, what do you do when you burn your mouth with hot coffee? asked a young lady, "Swear," said the doctor.—Exchange.

Phenacetine has grown in favor. At one time a case of poisoning from it was reported, but this was found to be caused by its being mixed with acetanilid. Both acetanilid and phenacetine have been added to the British Pharmacopæia.

THE WORKING LIFE A HAPPY LIFE, -- "Man," it has been said, "is born to trouble as the sparks that fly upward." Happily there is a hereditary antidote to this inheritence, for it may be as truly said that man is born to work, and work is one of the great sources of his happiness. The work-aday life is the happy life. Every one has pleasure in work when he takes to it with earnestness. Pleasure in work is therefore a measure of earnestness in it, and the better the work the greater the pleasure. All power brings with it its measure of enjoyment, and to man is given, in addition to the animal power and the enjoyment of the body the higher and greater power and enjoyment of mind and thought. The former naturally preponderates in early life, the latter at a later period; but both are necessary to make up the complement of the perfect man. Man should rejoice, not only in the growing strength and activity of the body, but also in the increasing vigor and power of his mental faculties and in the means by which they are promoted. - Sir Geo. M. Humphry.

MR. CLEVELAND AND THE CONGRESS.

In a short time the *Dental Tribune* proposes to circulate a petition among the dentists of Chicago to invite, as citizens of the city and State, the President of the United States to officiate at the opening of the World's Columbian Dental Congress, Thursday morning, August 17th. Mr. Cleveland performed a like service for the International Medical Congress at Washington in 1887, and the dentists who enjoyed the good fortune to be present on that occasion also pleasantly remember the reception tendered to them by the President at the White House. The dental profession to-day is the equal of the medical profession in its ability to alleviate pain and give relief to the suffering. While the President

would confer an honor to the members of a profession composed largely of scientific men, he would also reflect an equal honor on the great office which he occupies. The entire profession of Chicago, irrespective of party affiliation, will join in the invitation. The State of Illinois in general and Chicago in particular have shown a marked interest in the President-elect, and he will find a royal welcome whenever he invades their boundaries; then, too, about that time of the year Washington is oppressive and unhealthy, while the lakes and rivers of our beautiful neighbor, Wisconsin, are full of fish of every kind.—Dental Tribune.

ANÆSTHESIA.

COCAINE.—Bignon (Bulletin general de Therapeutique, No. 8, 1892) finds that acid solutions of cocaine exercise but slight or no anæsthetic effects. Therefore, the ordinary solutions of cocain. muriat. should be rendered neutral. If an excess of carbonate of soda is added to such a solution, the cocaine is freed forming a very finely divided suspension in the alkaline fluid.

Bignon calls this suspension "lait de cocaine" (milk of cocaine), and says that, when freshly made, it produces its best anæsthetic effects.

ETHYL BROMIDE.—The Noviny lekarskie (No. 6, 1892) sums up 200 cases of anæsthesia produced by ethyl bromide (not ethylene bromide. Editor Condensed Extracts) and signalizes the following advantages from its employment:

- 1. Ethyl bromide can be used in out-door practice; its application is very simple, requiring only Esmarch's mask; no assistant is needed.
- 2. Anæsthesia results very quickly and lasts from two to five minutes, whereupon the patients are able to go home. The stage of excitement, with which chloroform narcosis begins, is absent or very rare in the use of ethyl bromide.
- 3. Pulse and respiration undergo no change. Cyanosis almost never appears.
 - 4. Vomiting hardly ever occurs.
 - 5. Ethyl bromide is cheap.

Indications for the use of ethyl boomide: All short operations,

as incision and evacuation of abscesses; puncture of and injections into cold abscesses and joints in children; curetting tuberculous lymphatic glands; extirpation of small neoplasms, employment of Paquelin's cautery; tooth extraction; rib-resection in empyemia not complicated with phthissis.

Counter-indications: All operative procedures requiring more than five minutes for their execution; reduction of fractures and dislocations; in drunkards or persons affected with diseases of the kidneys, heart or lungs, excepting uncomplicated empyemia.

General anæsthesia with ethyl bromide is preferable to local anæsthesia with cocaine in sensitive: patients, as thus they are avoided the pain of injection.

Ethyl bromide is preferable to nitrous oxide gas on account of the simplicity of its use, its requiring no apparatus, absence of the sensation of strangling and no production of cyanosis.

ANTISEPTICS.

PHENOSALYL.—De Christmas (Annales de l'Institut Pasteur) experimented with the bacteriacidal action of several antiseptic mixtures and found that the following merits preference on account of its solubility and antiseptic value:

\mathbf{R}	Ac. carbol	9 parts.
	Ac. salicyl	1 part.
	Ac. lactic	2 parts.
	Menthol1:	10 part.

Heat the three acids until they liquify and add the menthol.

. The author calls this mixture "phenosalyl."

. It is very soluble in glycerine and is soluble in water up to 4%

Its antiseptic action is thrice that of carbolic acid, and twice that of creoline, lysol or solveol. Corrosive sublimate only acts more strongly.—Condesnsed Extracts.

THE CONTRACTION OF RUBBER-PLATES.—The fact is well established that vulcanite contracts in cooling, and, in consequence, dental plates made up with section teeth almost

invariably warp, and require more or less manipulation before a satisfactory fit is secured. In the case of upper plates, the change is quite apparent, the rear palatal portion being thrown up, causing the plate to rock. The arching up of this part of the plate is caused by the contraction of that portion immediately behind the teeth, the thin palatal part acting as a stay, and diminishing to some extent the amount of change experienced.

When, in repairing an upper plate, the entire portion is sawed out, it will be found that its heels will spring together, certainly as much as the amount removed by the saw cut, and sometimes even more. This shows that the same action takes place with lower plates, and to a greater extent than with upper ones. As they leave the vulcanizer full lower plates, with section feeth, are always spring together at the heels, and are too narrow for the mouth. If they are re-vulcanized, they are thereby made still narrower, and are, thereafter, in many cases, not capable of being worn with comfort. If they are heated sufficiently to soften the rubber and are then widened, the beneficial effect upon the fit will be quite apparent.—Dr. Snow in Practitioner and Advertiser.

CLEAR SHELLAC VARNISH.—To get an absolutely clear solution of shellac has long been a desideratum, not only with microscopists, but with all others who have occasional need of the medium for cements, etc. It may be prepared by first making an alcoholic solution of shellac in the usual way; a little benzole is then added, and the mixture well shaken. In the course of from twenty-four to forty-eight hours, the fluid will have separated into two distinct layers, an upper alcoholic stratum, perfectly clear, and of a dark-red color, while under it is a turbid mixture containing the impurities. The clear solution may be decanted or drawn off with a pipette.—National Druggist.

"Professor: What has become of Tom Appleton? Wasn't he studying with the class last year?

Ah, yes; Appleton—poor fellow! A fine student, but absent minded in the use of chemicals—very. That discoloration on the ceiling—notice it?

Yes.

That's Appleton."

OPERATIVE DENTISTRY.

BY DR. R. ATMAR SMITH, CHARLESTON.

Mr. President: You have deemed it wise, apparently, to appoint me as chairman of this committee and to open the subject for discussion. I will simply give you a rambling number of comments upon some of the various subjects that merit discussion under the general head of Operative Dentistry. There is no subject pertaining to dentistry that is so fraught with interest and so deserving to our best efforts than this. The dentist should be familiar with hygiene the science of health; he should be thoroughly conversant with Dental Therapeutics and Materia Medica, that he may the more thoroughly procure perfect results in probably his most artistic work, and he should thoroughly understand Pathology in order the better to use his knowledge of the latter and perfectly determine when he has procured the former or But we will suppose these have been learned and dive into the subject proper. Under this general head we have a subdivision or extraction of teeth, which is one branch that certainly interests the profession to an almost unlimited extent. Oftentimes we hear members of the profession denounce this practice almost intoto, but, gentlemen, if the practice of more than fifteen years has taught me anything it has taught me this, that all teeth cannot be saved, and that with regret we are often compelled to extract teeth that we would like to save: sometimes because we are unable to control our patients, sometimes because they are not willing to submit to the necessary treatment, and then again oftentimes the teeth will not yield to any treatment within our knowledge. Are there any of us so wise as to gainsay this latter statement? I believe there are cases and many of them, where good judgment suggests extraction in preference to any other treatment. I have only lately become cognizant of a piece of work done by a skillful Northern dentist that I consider malpractice, and yet I presume it is of common occurrence. A gentleman now in. Charleston came to me wearing a full upper set and a lower

Read before South Carolina Dental Society.

set minus the six oral teeth and these were bridged. A really nice piece of work was put in, the four incisors attached to the bridge which was held in position by the canines which were capped. He informed me that he had the nerves killed and taken out of two of the incisors. the other two were dead and treated. He had an abscess on one of the canines, and yet this bridge was put on at a great cost and with a guarantee of 25 years service—it was eight vears ago—he has but recently suffered fearfully with an abscess in one canine, from which the bridge became detached, being loose he toyed with it until he brought out the bridge with the other canine. I took impression of his mouth with the plate in and vulcanized in it the bridge, thus making him a temporary set; of course I extracted the roots which were so loose as not to give any pain. much more sensible it would have been to make a complete denture from the first not so profitable of course. To my mind this was a species of swindling, let the work itself be ever so well done. If this party had had a good set of lower teeth excepting the incisors and canines why then I should not condemn the bridge. And I believe, gentlemen, our anxiety to save teeth often induces us to entail unnecessary suffering and after annoyance upon our patients, yet I would not have you believe me to be in favor of not using our best endeavors to save those teeth that can be made useful, but when we expend time and labor in this way let judgment demonstrate to us that we are really serving our patients and not simply trying to display our skill for no beneficial end except that of self. Oftentimes we may successfuly treat and build upon a stump so as to make it substantial enough for a really useful gold crown, and in a similar way put on an ornamental and very satisfactory Logan crown or its equivalent. My own experience teaches me that a conservative practice is decidedly more conducive to practically safe results, than extremes in either regard. Another branch of this subject is that large one of filling The cement specialist belong to one of the extremes as also do the all gold men. The conservative men steers clear of these breakers and studies out what will give the greatest amount of service in a given place. In spite of all

of our efforts and the exercise of our best judgment we are at times disappointed at the results obtained. But in general practice we find this plan the most successful. When teeth require gold we should put gold in, when amalgam, tin or cement are thought to be best for preservation of a tooth, the dentist should use one of these without fear and with confidence.

I believe I have been tolerably successful in my practice but there is in the mouth localities and these conditions are often met with, when our efforts are more often failures than successes. I allude to proximal cavities reaching up to the margin of the gum, specially in bicuspids and molars. What is the best material to use in these cases? This question perplexes me and in some cases I have been fearfully annoyed to see failure where I expected success. Gold, most generally, it is impossible to properly use. Amalgam, the better, is hardly successful. I have used tin near the cervical walls and amalgam in the main cavity, but when cement is used for the latter I frequently place guttapercha at this vital point; this latter has given me some satisfaction, but it is not perfect in its results. Are any here sufficiently informed to give the name of a filling that will prove permanent in these locations?

THE COLUMBIA DAILY CALENDAR remains the only valuable daily pad calendar. The calendar for '93 is of the same general design as that of previous years, consisting of 366 leaves, one for every day in the year, and a calendar for the entire year. The day of the week, of the month, and of the year are given, and on each leaf is a short sermon on the "Gospel of Outdoors, Health, and Happiness,,' with valuable hints on practical road making. The leaves are so arranged that there will be no stub left, and each one can be referred to at any time during the The pad is upon a metalic stand of ivory black, arranged so as to rest upon the desk at a convenient angle. The pad matter, which in the aggregate, is enough to make a book, is all fresh and new, and is of more pertinent value than that of any previous calendar. The calendar is issued by the Pope Mfg Co., of Boston, New York and Chicago.

Ripans Tabules: for sour stomach.



Southern Dental Journal

A MONTHLY PUBLICATION

DEVOTED TO THE INTEREST OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. Johnson, 305 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to Southern Dental Journal, 27 E. Hunter St., Atlants, Ga.

Editorial.

It is with great pleasure that I again greet the readers and patrons of the Southern Dental Journal as its editor.

I have this day assumed entire control, and the JOURNAL will hereafter be edited and published under my personal supervision.

All contracts and agreements made with the Mutual Printing Co., as publishers, and Dr. R. A. Holliday, its recent editor, will be carried out fully and faithfully.

But one important change will be made at present; an increase in subscription price to its former figure. Any business man will readily see, and the editors and publishers have found from experience, that it is impossible to publish a monthly journal of the size and importance of the Southern Dental Journal at the small price of \$1.00 per year, where the publication must be made self-sustaining and is not used by the publishers as a medium for advertising their business. The increase will enable us to make it a larger and better journal, and we feel sure our subscribers will not object to its being raised to its former price.

The Journal will be conducted on strict business principles and our contracts will be carried out promptly, faithfully and to the letter. The Southern Dental Journal is the promoter of the interests of dentistry in the South, and to that end we will labor earnestly, zealously and faithfully.

It is but just to say that this issue has been gotten out under the supervision of Dr. Holliday, the retiring editor, as I did not assume control until the matter was very nearly all made up.

H. H. JOHNSON.

Just one year ago Dr. H. H. Johnson retired from the editorial management of the Journal, and the present retiring editor was appointed to succeed him. It is with regret that I have to announce the severing of my connection with journalism, but the readers of the Journal will be better served by the exchange, as Dr. Johnson's peculiar fitness for the place will insure the publication of a superior journal.

It is proper at this time to thank those who have encouraged and sustained me in getting out a creditable volume. We bespeak their co-operation for the new editor. Some adverse criticism has been noticed, but this is to be expected of any publication, and only serves to spur the editor on to increased efforts.

R. A. HOLLIDAY.

TIME OF MEETING CHANGED.

The World's Columbian Dental Congress will be held in Chicago August 14th to 19th, instead of August 17th to 27th as heretofore advertised. This is occasioned by the large number of Congresses that have to be provided for. Among the other Congresses assigned to be held during the same week are those of Pharmacy, Medical Jurisprudence and Horticulture. Ample accomodation has been provided. This seems a very short time in which to hold the meeting and will necessitate the holding of evening sessions. So important a gathering should not be crowded into so short a time, yet a due regard for other bodies are to be considered.

The list of committees of the Georgia State Society are published in this number. We would urge upon those appointed to prepare essays—that the duty be performed. Many accept the appointment, and when reports are called for render an excuse. This is an imposition on the presiding officer who made the appointment and is an injury to the Society. Your acceptance is a pledge that should be re-

deemed. The local committee will look after the meeting, and every convenience will be provided for the comfort of their guests. Clinics will be a special feature.

THE NEW YEAR AND THE OLD.

The emotions that are most powerful within us, as we stand at the closing of the old, on the threshold of the new year, may be best described in the words of Wordsworth as "painfully pleasing."

No man of even ordinary intelligence, or of common observation of himself and others, can fail to mourn over the failures and follies of the past, and yet, with hope that "springs eternal," confidently expects better things next year.

The year '93 will be long remembered for its achievements in dentistry. In August the Columbian Dental Congress will meet at Chicago. The whole world of dentistry will be there. No such body of dentists have ever met as will be gathered. Committees have been appointed, and contributions to dentistry as a science, as a practice, and in the history of the profession, will be expected from all nations. From each State committees will bring the records of the past. What is being done by Georgia, the Carolinas and other Southern State societies? The least that could be asked would be a clear, brief history of the dental profession from the earlist times in these States.

Such records, carefully gathered and bound in one great volume, will be priceless, and would be treasured for centuries to come. We know that in some States this work is being performed. Not one should be left out.

In this month the State Society of Arkansas will meet. Louisiana in February; Mississippi and Alabama meet in April; Georgia, Florida, North Carolina and others in May.

The president of each State Society should be actively at work now, stirring up the committees or appointing competent men to do this and other work for the great gathering. What of the local work of our State associations? Last year in Virginia the president reported only twenty members present out of a membership of nearly one hundred, with one other hundred in the State not members. In North Carolina

about fifty were present, with one hundred and sixty dentists in the State. With little variation we could go through all the State societies with about the same result. About onefourth of the dentists attend the yearly gatherings, and of these perhaps one-half dozen in each State take an active part in the proceedings. Glance over the minutes of many of these meetings and you will find first, one or two members who are eternally on the floor. Their tongues run on like "the brook"—forever; but of really new thought, how little do we find! As a rule men tell of individual experiences. The same old subjects-nerve-capping, Riggs' disease, abcess, etc.—told in the same old way. A few who read, and dig, and delve—who are trying to find first cause. then study effect, then search for remedy—are silent. There is so much chaff that the wheat hides its modest head. writer counted how often one man's name appeared as speaking in one society and found that he consumed nearly onethird of the time, but could find no new thought in all that was said. Committees should consist only of those who will consent to serve, and each committee should collate its work—get the milk out of the cocoanut. Five good papers. carefully prepared, reporting on the "state of the art," the results to date of last year's work and discovery everywhere. with several able men to discuss each paper, and with a presiding officer who would hold members well in hand-not speaking himself, except to keep others well in line; clinicians (only two or three) appointed to demonstrate any new mode men who have no "axe to grind;" to keep down empty-headed, frothy fellows; to see that petty questions of mere detail and routine should not be permitted to consume the few hours of the meeting—these are the wants of the hour in our dental societies. Men come from fifty to threehundred miles expecting to hear new thoughts and to see new demonstrations. They come once and go away, asking, "What have we learned?"

Gentlemen of the profession, the year is before us. What will we do with it?

The SOUTHERN DENTAL JOURNAL will observe, record and report the proceedings of each State society South. We hope that the year will show a marked improvemental along the lines indicated. Send in your subscriptions.

ERRATTA.—We take pleasure in correcting the following typographical errors in a paper in December number of the Journal, entitled "A Word of Warning:"

In the second paragraph, tenth line, read United States Courts, not "Senate."

In the twentieth line of same paragraph, read insesting for soldering; not "inserting."

In the third paragraph and tenth line, read espionage; not "epironage."

In the tenth paragraph, Larzar's wife; not "Hagar's wife" as printed.

Dentists and their families in the State of Georgia who intend going to the Columbian Dental Congress at Chicago, Ill., in August, 1893, will please report by letter at an early date to Dr. L. D. Carpenter, 47½ Whitehall St., Atlanta, Ga., Chairman of State Committee of Arrangements.

Special inducements in accommodations can be secured, provided a large party is made up to travel together. Please give this prompt attention.

L. D. CARPENTER.

New Books.

METHODS OF FILLING TEETH, by Rodriques Ottolengui, M. D. S., New York City. Published by the S. S. White Dental Mfg. Co., Philadelphia, 1892.

The work is, as the preface suggests, a book for students and is not intended to be a cyclopedia of operative dentistry, but describes in a clear and concise manner the popular and successful methods of filling teeth. The work is a valuable one for this class and older practitioners will glean many valuable points by a perusal of its pages.

THE ANGLE SYSTEM OF REGULATION AND RETENTION OF THE TEETH. Third Edition. Revised and enlarged. By Edward H. Angle, D.D.S., former Professor of Histology and Orthodontia, and Comparative Anatomy of the Teeth, in the Dental Department of the University of Minnesota. Published by the Wilmington Dental Eanufacturing Company, 1413 Filbert Street, Philadelphia, Pa., 1892. Paper, pp. 51, 75 cents.

The fact that it has been necessary to issue a third edition is proof sufficient that a demand for this character of

literature does exist. Dr. Angle presents in the few pages of the pamphlet a concise outline of the system bearing his name. Any dentist will find something useful and practical by perusing its pages.

THE STUDENTS' QUIZ SERIES. Physiology, by Frederick A. Manning' M. D., Attending Surgeon Manhattan Hospital, New York. Series edited by Bern B. Gallaudet, M. D., Demonstrator of Anatomy, College of Physicians and Surgeons, New York, Visiting Surgeon Bellevue Hospital, New York. Pocket size, 12mo., 201 pages, 69 illustrations, \$1.00. Philadelphia, Lea Brothers & Co.

FROM THE PREFACE.

The present book is a brief summary of the salient features of Human Physiology. The idea has been to present the subject in such a manner as to fix in the memory facts already learned in less limited treatises. The book is practically an abstract of standard works, and principally of those of Dalton, Foster and Kirke. The cuts are many of them from Dalton's *Physiology*. Doubtful questions have often been referred to Foster. whose *Text Books of Physiology* is the reference book of a large proportion of the schools.

ANATOMY (DOUBLE NUMBER.) By Fred F. Brockway, M. D., Assistant Demonstrator of Anatomy, College of Physicians and Surgeons, New York, and A. O'Malley, M. D., Instructor in Surgery, New York Polyclinic. Being Volume 1 of the Students' Quiz Series, edited by Bern B. Gallaudet, M. D., Demonstrator of Anatomy, College of Physicians and Surgeons, New York; Visiting Surgeon, Bellevue Hospital, New York. Pocket-size 12 mo., 367 pages, 15 illustrations. Limp cloth, \$1.75.

These books are not intended to replace the larger text-books and should not be so used, but as an aid or adjunct to study. The matter is so arranged in the form of questions and answers—being especially designed for students, for whom they are invaluable.

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DENTAL SOCIETY ANNOUNCEMENTS.

WORLD'S COLUMBIAN DENTAL CONGRESS.

STANDING COMMITTEES.

The following additions have been made to the Committees of the Congress, and are to be added to the list as published in the DENTAL COSMOS for April, 1892, page 324:

COMMITTEE ON CONFERENCE.

C N Pierce, Philadelphia, Pa: A Warner, Ir, San Francisco, Cal; George H Cushing, Chicago, Ill; J N Crouse, Chicago, Ill; W Herbst, Bremen, Germany; Wm Jarvie, Brooklyn, NY; R E Watkins, Eutaw, Ala; S B Brown, Fort Wayne, Ind; S A Main, New York city, N Y; H A Smith, Cincinnati, Ohio; C R Butler, Cleveland, Ohio; Charles J Essig, Philadelphia, Pa; James Truman, Philadelphia, Pa; Garrett Newkirk, Chicago, Ill; A R Eaton, Elizabeth, N J; W J Younger, San Francisco, Cal; H M Hunter, San Antonio, Texas: W R Patton, Cologne, Germany: F H Balkwill, Plymouth, England; R T Stack, Dublin, Ireland; Henry Sewill, London, England; B A Muckenfuss, Charleston, S C; W E Magill, Erie, Pa; C C Chrittenden, Madison, Wis; Frank Abbott, New York city, NY; CE Francis, New York city, NY; JL Williams, Boston, Mass; E A Bogue, New York city, N Y; P G C Hunt, Indianapolis, Ind; J E Cravens, Indianapolis, Ind; E H Angle, Minneapolis, Minn; Ludwig Hollander, Halle, Germany; W Campbell, Dundee, Scotland; S B Cook, Chattanooga, Tenn; W T Arrington, Memphis, Tenn; B G Maercklein, Milwaukee, Wis; A W Nason, Omaha, Neb; S J Barber, Portland, Ore; C S Case, Jackson, Miss; L C Ingersoll, Keokuk, Iowa; Wm Taft, Cincinnati, Ohio; J Hayhurst, Lambertville, N J; A O Rawls, Lexington, Ky; J N Farrar, New York city, NY; E T Darby, Philadelphia, Pa; G W Rembert, Natchez, Miss; Louis Augspath, Little Rock, Ark; W G A Bonwill, Philadelphia, Pa; T B Welch, Vineland, N J; George Watt, Xenia, Ohio; O E Hill, Brooklyn, NY; M Delapierre, Brussels, Belgium; C Van der Hoeven, Haag, Holland; R. Skogsborg, Stockholm, Sweden; Julius Scheff, Vienna, Austria; Wm Alfred Hunt, Somersetshire,

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No. 17. COMMITTEE ON ESSAYS.

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No. 18. Committee on History of Dentistry in the United States.

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No. 19. COMMITTE ON NOMENCLATURE.

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No. 20. Committee to Promote the Appointment of Dental Surgeons in the Armies and Navies of the World.

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No. 21. COMMITTEE ON CARE OF THE TEETH OF THE POOR. Chairman, T H Parramore, Hampton, Va; M V Johnson, Holden, Mo; J Allen Osmun, Newark, N J; C S Butler Buffalo, N Y; Corydon Palmer, Warren, O; Geo E Adams,

No. 22. Committee on Microscopy and Bacteriology.

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No. 23. COMMITTEE ON PRIZE ESSAYS.

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A W Harlan, Chicago, Ill.

Sub-Committee.

A W Harlan, Chicago, Ill; O A Hunt, Iowa City, Ia; John S Marshall, Chicago, Ill.

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Use of Rubber Dam,—W C Wardlaw.

REGULATING.—C V Rosser.

Pyorrhea Alveolaris.—A Paper by T P Hinman.

At the Ohio State Dental Society, held at Columbus, Dec. 6-9-'92, the officers elected were as follows:

President, G H Wilson, Cleveland; 1st Vice-President, Chas Welch, Wilmington; 2d Vice-President, W H Todd, Columbus; Secretary, L P Bethel, Kent; Assistant Secretary, Henry Barnes, Cleveland; Treasurer, Chas I Keely, Hamilton.

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Southern Dental Journal.

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No. 2.

Original.

AN OPEN LETTER TO A YOUNG FRIEND.

I am pleased to acknowledge receipt of your letter of recent date, contents of which I have carefully noted.

Had you not expressed so positive a determination to study dentistry, I might venture to advise against it, as the outlook for dentistry, in my judgment, is not so favorable as it was ten years ago.

While I appreciate the compliment you pay me in proposing to become an office student, I must decline according to your proposition, not that I do or could object to having you with me, for your presence would be pleasant and agreeable to me, and it would afford me very great pleasure to assist you in any way in my power in obtaining knowledge of dentistry.

Now that I decline your proposition to study with me, I will advise against your going into any office to study and receive practical instruction; and will, as a friend interested for your future success, offer a few suggestions which, if heeded, will prove beneficial; and, in course of time, you will fully comprehend and appreciate.

There was a time when it was advisable and beneficial to receive office instruction before attending lectures, but it is not so now. The best thing you can do is to go to college unencumbered with practical knowledge, and throw yourself entirely upon college professors and demonstrators for light and knowledge pertaining to dentistry; let them do all they

can and will for you, and not be troubled to have to undo anything that some one else has done. By such a course you will incur their good favor and disposition to instruct for your benefit. You will make better headway and graduate with more ease than if you were to appear very knowing, and disposed to be contentious and fight questions all the while.

At the present day, it is time lost to study practical dentistry prior to attending lectures. Not so in days past. This is an age of rapid progress. "Get up and get," and be in a hurry about it. And there are many new theories, inventions, remedies, material, etc., coming to the front almost daily.

You will find in dental colleges, some of the professors (like other men) tied to their hobby, and will ride them out of all reason. Respect such; their position requires it, but be careful of their teaching and influence. Credit for half they say is as much as they merit.

No man of hobbies and prejudices can be truly a conservator as a teacher, and a teacher who is not eclectic and conservative in theory and practice, is an unsafe guide to pattern after.

All things considered, the less you or any one else knows about practical dentistry (mechanical or operative) before attending lectures, the better for results. Connected with the subject, however, there are certain facts you should be well grounded in, to-wit: let it be established in your mind beyond a question of doubt, that you have a fancy and talent for the study and practice of dentistry; that you have weighed the subject well, and have been influenced from proper motives (realizing the fact that the practice of dentistry is no light work or child's play,) and that it will be your pleasure and ambition to strive for excellence as a practitioner; hoping to justly merit the respect, confidence and esteem of professional brethren and the public. With such a foundation to build upon, you may hope for success.

If you can arrange to obtain a fair knowledge of anatomy, physiology, pathology, chemistry, metallurgy, materia medica (Allopath and Homeopath) before attending lectures, it will be well for you to do so. Obtain the requisite books and

study them carefully. So fortified, you will have the more time to devote to practical features at college. Prepare to be a dentist in the truest acceptation of the term,

Work for thoroughness as to knowledge of the dental structure. Associate membranes and tissues, and all diseases pertaining thereto, and how to treat for preservation of same. Do not act unwisely as some do, and try to learn more of general medicine and surgery than of your specialty—dentistry, but determine to know all of dentistry, and to know it well.

Remember there is, and should be, distinction. A physician is a physician, and not a dentist. A dentist should be a dentist, and nothing more, (professionally). Combinations, do not always work to the best advantage.

A dentist, skilled and meritorious, is generally appreciated, and is liberally patronized wherever located. In these progressive times, some are prone to stride too far, and sometimes overreach the boundary line. Make your mark for professional knowledge and excellence high and determine to reach it, but be conservative and modest, and try to keep within bounds, and with an unfaltering purpose to be strictly professional under all circumstances.

In my next I will advise you as to course at college.

Very truly yours,

OLD PRACTITIONER.

Selections.

SURGICAL TREATMENT OF CHRONIC ALVEO-LAR ABSCESS.*

BY L. E. CUSTER, B. S., D. D. S., DAYTON, OHIO.

Owing to the breadth of this subject, only the excision of the apex of the root will be here considered.

True alveolar abscess, except in rare instances, is caused by the death of the pulp. Such an abscess becomes chronic from one or both of two conditions: there may be a continual discharge of putrefactive poison from the apical fora-

^{*}Abstract of a Paper read before the Ohio Dental Society, December, 1892.

men, or the apex and the alveolus along the pus tract may be dead. The apex is not only dead, but is often covered with serumal calculus, or is partially resolved.

The apex of a root is composed entirely of cementum. The cementum begins at the enamel as the merest coating, and increases in thickness as it approaches the end of the root till it meets that from the opposite side, where it forms a cone of considerable thickness. It not only covers the root portion of the dentine, but forms so thick a layer at the end that it is the end itself. Successive transverse sections of the root of a tooth show the first to be entirely cementum. When the dentine is reached it increases very rapidly in proportion, due to the general cone shape of the root, while the cementum decreases in thickness. Although the cementum is so intimately connected with the dentine, it is quite a different structure: it is analogous to bone, both chemically and histologically. Cementum contains about 8 per cent. less lime salts than the dentine. When dead, it is rough and porous, and is more likely to be an irritant than a smooth surface of dentine. It invites the deposition of serumal calculus, and is frequently resorbed in places.

A recent paper in *The Dental Cosmos* on "Electricity in Dentistry," is very interesting to read, but beyond the mere statement of the writer that he believes that the time is coming when electricity will be used for obtunding sensitive dentine, there is neither reference to the subject, nor help for our difficulty.

There are those who profess to have overcome the difficulty formerly existing in the use of electricity. I must confess, after repeated conversations with the patients of one of these, that there is not a little truth in their claims, but I ask the question, if this is a fact, why are they hiding so valuable a secret or discovery? Why is it not given to the profession for the benefit of humanity?

Surely, if we call ours a liberal profession, the withholding of such knowledge or skill can call forth only the strongest condemnation. We do not ask that the knowledge be given us gratuitously, but we are willing to pay, and pay well for it. We are not among those who profess the gift doctrine to the world, who, when they invent a labor-saving,

or pain-destroying machine, patent it, and thus contradict themselves; but, on the contrary, we hold that every man is entitled to the reward which comes from the creation of his own brain.

We think him none the less a benefactor of his race if, having discovered a means or remedy to alleviate pain, he charges a fee for such knowledge; for, gentlemen, it is what we are all doing every day of our lives, viz.: charging for our knowledge.

I said in the opening of this, that I had nothing new to advance; but I leave with you my mite, hoping it will receive at your hands a fair trial. Don't expect too much, for absolute success is not claimed.

After the dam is applied, I take Dr. Black's 1-2-3 mixture, or oil of cassia, wintergreen, or other essential oils, on a pledget of cotton, placing the cotton in the cavity, and with my chip syringe, having a platinum point, draw the heated air from the lamp, heating the nozzle of the syringe red-hot, blow gently onto the cotton until the oil is driven from it. This is done repeatedly, until the cotton looks as though scorched by fire. Now, removing the cotton from the cavity, we are able to cut out quite a considerable amount without pain to the patient. This is especially true of the leathery white, or light brown, decay found in the teeth of young children.

During the development of an alveolar abscess the peridental membrane sometimes becomes stripped from the end of the root, and if the end remains bathed in pus for any length of time, the membrane fails to reattach, and this portion of the root is then dead. Although the first cause of abscess may now be corrected by disinfecting and filling the pulp-canal, the dead cementum, rough, partially resorbed, and perhaps covered with serumal calculus, is sufficient cause for a persistent formation of pus, and its excision is then indicated.

The operation is not a new one, by any means. It is quite easily performed on the anterior teeth, but on roots of molars and bicuspids it is somewhat difficult, owing to their flat shape and the difficulty of operating in that part of the mouth. There is less danger associated with this operation

than with the extraction of a tooth. Care should be used when operating under the antrum, that the floor is not perforated.

The sinus leading from the apex of the root is not always the shortest route, but is often tortuous, and in the majority of cases, open towards the crown.

It is not absolutely necessary that the apex of the root be exposed, but it is better, if it is possible, to do so. It is seldom that there is any alveolus just over the apex in a chronic abscess, and if the sinus does not open here, an incision may be made through the gum, and this enlarged by tents. Instead of cotton for the purpose, let me suggest the use of the sponge tent used in gynæcology. I tried seatangle tent, but only once: it could hardly be removed. The sponge acts beautifully, and may be easily removed. A piece cut the size of the opening will expand enough that one insertion is sometimes sufficient.

Free access having been gained, and the point of excision having been determined upon, it has been my practice to drill directly through the middle with a No. 3 spear-pointed drill, then follow with a No. 3 fissure-point, pressing it laterally on either side till the end is separated. If you bear a little towards the crown at the same time, the end will be somewhat rounded. By using the spear drill first, an idea of the root's diameter is obtained, and there will also be no slipping of the fissure drill, as is likely to occur if you commence with instrument on the side of the root.

After the apex has been excised, it is advised to smooth the edges of the new end with proper points. This is the correct thing to do, and if you are sure you can perform this delicate operation without doing more cutting along the side of the root than on the sharp corner, do so. If you have handled the fissure drill well, the end left by this will be somewhat round and quite smooth, and nature will take care of the sharp edges better than the ripped-up peridental membrane and the roughened cementum which was done in your efforts to smooth the corners.

The end presented after the operation of excision, is largely dentine; although this is dead, it has been disinfected, and the pulp-canal filled, and is so dense and smooth as to be a

non-irritant, and becomes encysted. The cementum around it is alive and nourished by the peridental membrane, and if there is no dead alveolus, the irritation produced by the operation and the freshening of the walls of the old pus tract stimulate healthy repair and the sinus closes with little if any therpeutical assistance.—Ohio Journal.

REFLEX ACTION.

BY O. THOMPSON, D. D. S., NEENAH, WIS.

I come before you for the first time in my professional career to read an essay on reflex action. Not that I can hope to teach you anything new, or, in fact, to explain the matter in any better way than it has already been done by hundreds of abler men than myself who have had to deal with the question.

I simply offer this to you, not that I am able to cope with so deep a subject, but to have it brought before you and hear it discussed from the dental standpoint. For that reason I shall endeavor only to explain the meaning of the term reflex action as I understand it, and cite to you one or two cases of reflex manifestation that have come under my direct notice in practice.

Prof. Geo. H. Cushing gave our class this definition, which I think covers the ground very nicely.

Reflex action is an outward nervous impulse expressed at some point more or less remote from the point at which irritation was applied to produce it.

According to Kirke, for the manifestations of every reflex action these things are necessary: (1), one or more perfect centripetal nerve fibers to convey an impression; (2), a nervous center for its reception and by which it may be reflected; (3), one or more centrifugal nerve fibers along which the impression may be conducted to (4), muscular or other tissue by which the effect is manifested. In the absence of any one of these conditions, a proper reflex action could not take place.

The particular kind of action produced is determined by the construction of the end organ, which is excited to action by the reflex act. If the centrifugal nerve terminates in a muscle, there is a contraction of that muscle; if it terminates in a secreting organ, that secreting organ is excited to activity; if it terminates in a censory filament, pain is produced.

The principal reflex manifestation that comes under the hand of the dentist, is the one where the efferent nerve has its termination in a censory filament, thereby producing pain. Of this class I will now proceed to give to you the two most important cases that it has been my lot to treat.

A little over a year ago a married lady of about thirtyeight years of age, came to me from one of our painless advertising dentists (at one time supposed to be an active law-abiding member of this society), for an examination of her teeth with a view of learning what attention they were in need of, and to see about having them attended to. While making the examination my attention was called to a left superior six year molar containing a large cement filling extending over the greater portion of mesial, and a part of the buccal and grinding surfaces. The tooth, she informed me, had been the source of quite a good deal of trouble Not that it had pained her very much, but that it was very tender and sore to the touch. did it annoy her while eating. She said that nearly a year previous the tooth had been treated, and the present filling inserted by our aforesaid painless dentist who had expected to replace it with gold after a few days; she being quite anxious to have gold inserted. As she had lost the second bicuspid sometime before, thereby the filling was left quite conspicuous. But at the time appointed to have it done the tooth was so sore that she broke the appointment and made another, which was also broken for the same reason, after which she had neglected it till the present time.

She then asked if, in my opinion, there was anything that could be done for it that would relieve the soreness. I recommended the removal of the cement filling, that we might learn what condition the pulp was in. This she desired me to do; so, with the aid of a bur in the engine, I commenced carefully to remove the cement. I had gone scarcely half way through the filling when the odor of iodoform

became quite perceptible and continued to increase, when, all at once, the engine stopped with a sudden jerk, and upon withdrawing the bur from the cavity there came out attached to it, from the pulp cavity; a large pellet of cotton saturated with iodoform, showing the tooth to be pulpless. Upon searching the root canals, I found them also filled with cotton in the same condition.

I thoroughly washed the canals with peroxide of hydrogen, and after cleansing them I applied a dressing of the oil of eucalyptus, filled the cavity with gutta-percha, punctured the filling and dismissed the patient. 'She returned the third day, when I replaced the dressing, she stating that the tooth had given her the least trouble she had experienced with it. for a year.

Upon the second return she stated that the soreness was entirely gone, that she eats with it with as much comfort as with any of her teeth.

Fearing that all might not be well, another treatment was applied, and at the next sitting, three days later, the root canals were filled with chlora-percha and the cavity with cement. Two weeks later, there being no return of the soreness, the cement was replaced with gold. We usually, in treating reflex action, have the history and where the manifestation is located before treating, but in this case I did not get the history until after the treatment and cure, as it proved to be, was complete.

The lady told me that since she had had that tooth treated by her former dentist, over a year previous, she had experienced a great deal of pain in her left shoulder and elbow, especially upon lying on that side at night; that she was forced to sit up an hour or so every night and rub her arm to get relief from pain. She had applied to a physician who prescribed for rheumatism without giving relief. The day that the cement filling was removed her arm pained her so that she could scarcely sit in the chair, and it lasted about two hours after her return home, when it had ceased and not returned. After the second treatment she could lie on that side without a particle of pain, and she told me a few weeks ago that she had not had a return of it since the treat-

ment of that tooth, showing a complete cure of the pain in the elbow as well as the soreness in the tooth.

The next case was of a young lady sixteen years of age, who came to me to have a right inferior six-year molar treated that had been also filled by our friend, the advertiser.

Upon examination I found that the pulp had died under the capping, and was in a cheesy condition so familiar to you all, especially when found under a filling. After cleansing and treating until the soreness was gone. I filled the root canals with chlora-percha and the cavity with amalgam. did not see the patient again for a number of months. day I met her on the street, and during the conversation she told me that she was having a great deal of trouble with her right ear, and that she had been treating with a physician for some time without any relief. She also stated that the tooth I had treated for her was quite sore again. thought came to me that possibly the pain in the ear was due to the trouble with the tooth, she stating that she had never been subject to pain in the ear before. I persuaded her to come up to the office with me and have the filling removed, and the tooth treated, which was done. As a result, the pain in the ear ceased and had not returned when I last saw her.

These are not as important cases as do occur. You probably have all noticed cases given in the last number of the *Dental Cosmos*, page 570, to and including 572.

There are three very marked cases, where the seat of irritation lay in the teeth, the proper treatment of which resulted in complete cures.

Fellow-practitioners, does it not stand us well in hand to look well to the work we are doing, especially in the treatment of exposed, or nearly exposed, pulps. The five cases of reflex manifestations are the results of irritation from teeth that have come under the hand of the dentist. Now, if the proper treatment had been used, the trouble might have been avoided, at least, such could have been the case with those which came under my hand.

Facial neuralgia, in a large majority of cases, is a reflex action due to the teeth, and a great many of them the result of capping or filling over exposed or nearly exposed pulps.

In my judgment, the best treatment for exposed pulps is to devitalize, and with careful treatment of the nerve canals avoid the unpleasant results due to irritation produced upon nerve at that point.—Dental Review.

PERFECT OCCLUDING GOLD CROWNS.

BY W. H. WHITSLAR, M. D., D. D. S., CLEVELAND, OHIO.

Often cases present that irregularity of occlusion renders the ordinary use of the various dies in the market useless. Among the various expedients in such cases, the following may suffice:

Fit the band to root and trim on the occluding edges, with flat file, to line where side walls begin to curve upon occluding surface. Return band to root and fill to overflowing with plaster of paris well mixed, so as to set quickly. Have patient close teeth together naturally. When plaster is hard, remove band and trim, so as to make presentable surface, retaining the imprint of the occluding cusps. Use this model for making an impression in Mellotte's moldene, from which make a fusible metal die. Perfectly adjust to the band the resulting swaged cap and solder. Finish. Result, a perfect occluding crown.

Another Way.—Fill band with moldene or plaster and proceed to get "bite" as before, then insert this model into fusible metal almost cold, and drive gold plate into this mold with lead.

TO DRY A CAYITY BEFORE FILLING.—After applying absolute alcohol to the cavity, use a solution of sandarach and ether to line the cavity; dry this with hot air, which forces it into the ends of the tubules, completely sealing them; then proceed with the filling.

IN LIGATING RUBBER DAM, tie a small bead on the ligature, which, when tied around the tooth, will prevent the dam from coming over ligature; the bead should be on lingual side of tooth.



To MAKE MOISTURE-TIGHT GUTTA-PERCHA FILLINGS,—
Take common resin and dissolve in chloroform to desired thickness; place some of this in prepared cavity, and by the time the gutta-percha is heated the varnish will be in proper condition through evaporation of the chloroform. The varnish should not extend to the cavity margins. Apply the gutta-percha as usual, and pack with cold instruments. The cold instruments do not adhere as the warm ones do. When completed, the filling may be pared off to the proper contour by means of a heated thin-blade instrument, and the filling smoothed by the application of eucalyptol or oil of cajeput.

To Duplicate Models and Impressions.—Take printers' roller composition, melt in a water-bath until dissolved. Grease the model slightly with lard, and place it the same as if to mould a metal die, cover with a metal ring, (a tin can opened at both ends will do), and pour the melted composition over the model. Let this stand over night. By morning the material is hardened and the model can be withdrawn. The composition being elastic, it retains its shape, and a hundred models may be poured if necessary. Impressions may be duplicated in the same manner, by using impression instead of model.—Dr. J. G. Templeton, in Ohio Dental Journal.

CROWN WORK.

The most frequent cause leading to failure of collar crowns may be enumerated as follows:

- 1. Imperfectly prepared roots.
- 2. Low carat gold for band.
- 3. Roughly finished or porous band.
- 4. Band impinging on peridental membrane.
- 5. Failure to follow gum margin evenly.
- 6. Faulty articulation.
- 7. Failure to restore anatomical contour.

If we bear in mind the anatomy of a tooth, we see that the exposed portion of dentine that projects above the gum is entirely covered by a shell of enamel, which is also carried a little below the margin of the gum and is there overlapped by cementum. Now, in restoring a broken down crown, we cannot do better than imitate nature as closely as possible. The enamel should be entirely removed under the gum, leaving the cement uninjured and allowing our gold band to run up under the gum and the sharp edge overlapped by the cement, as was the case with the natural enamel. In that case we would have no irritation whatever, provided our gold is twenty-three carat fine and smoothly polished.

In many cases it will be necessary to not only remove all the enamel, but also cut into the dentine, leaving a shoulder, then a band of considerable thickness can be used, twenty-six gauge or even thicker, thus giving additional strength and rendering a more perfect contour possible. In no case should the sharp edge of the band project toward or come in contact with the peridental membrane, but should fall inside of the line of cement as did the natural enamel. But the smooth surface of the band about one-eighth of an inch from the edge at the point where it leaves the gum margin can be brought to bear considerably against the gum without danger of irritation, and would be beneficial by keeping collections from finding their way up under the free margin of the gum.—Dr. E. M. S. Fernandez, in Dental Review.

UNNECESSARY BURDENS OF THE DENTAL STUDENT.

BY L. P. HASKELL, CHICAGO.

The dental student has all he can do to "pull through',' even under the most favorable circumstances. With a large proportion of the studies of the medical student, he has those pertaining especially to dentistry. To this is added the really practical part of the course, the clinical demonstrations of the infirmary and labaratory. Of the latter there is not enough to begin to furnish the necessary instruction to qualify the student for successful practice. This being the condition of things, instruction should be simplified as far as possible, so as to be readily comprehended.

Prosthetic dentistry cannot be taught in the lecture room. As a rule, too much of the student's time is taken up with

details that cannot be comprehended except with an ocular demonstration in the laboratory. Not only this but much of the instruction is of such a complicated nature as to fail to enlist the attention and interest of the student; in fact, tends to discouragement.

If the lecturer could spend half the time spent in the lecture room, in practical demonstrations in the labaratory, aided by demonstrators of long experience, instead of young and inexperienced ones, the student would graduate far better qualified to practice than under the usual regime.

There is many a graduate who can describe the anatomy of the foot, who is unable to make a successful rubber denture.

It has seemed to me that if the instruction in Prosthetic Dentistry could be relegated to the last month or six weeks of the term and the students kept in the laboratory steadily at the bench, they would learn four times as much as under present methods.

These conclusions have been reached after forty-seven years experience in this specialty; seven years as lecturer in two dental colleges, and incidentally in giving clinics in three other colleges, and finally in conducting the first Post-Graduate School of Prosthetic Dentistry, with students from nearly every state in the Union, and from foreign countries. Most of these students were practicing dentists, many of whom were graduates of dental colleges, and all are united in saying that their month's instruction was for ahead of what they had received in college or from preceptors, in thoroughness and simplicity of methods.

If the following twenty-two questions are carefully followed the student will be saved all the petty annoyances from the use of zinc, and successfully make dies and swage plates that will fit, no matter how difficult the case.

1. What changes are necessary in the plaster cast for a full upper set?

Ans. The palatal bone is the only portion of the upper jaw that never yields to pressure, whereas the alveola is liable to change, and in a majority of mouths does to a greater or less extent. Unless provision is made to prevent it the plate will rest on the palate and rock.

With a thin film of wax raise the surface from near the anterior ridge to near the posterior margin of plate.

- 2. Are the vacuum cavities, so commonly used, necessary? Ans. If the plate fits so that it comes in close contact with the membrane there will be all the adhesion that is necessary, no matter what the shape of gums and palate.
 - 3. How should the model be shaped?

Ans. Flaring, so it will drop from the mould, as it will find its way out, and not mar the mould, as is liable if lifted.

4. When are "cores" needed, how made, and how used? Ans. In a very small per cent, of cases, the process is so

Ans. In a very small per cent. of cases, the process is so prominent, the model will not draw from the mould without removing a portion of the sand. The "core" is made by oiling the surface of the model as far as undercut; place on a slab, and apply 1 inch in thickness, equal parts of plaster and asbestos, the latter to prevent the core from shrinking and cracking, and breaking in using if more dies are needed; dry thoroughly, and mould with the core in place; as it drops from the mould replace and cast the die.

In partial lower sets, when needed, the core must be made in two sections; the first extending from the posterior corner, two-thirds across the model; when hard, jar loose and make the other section from the other corner, to meet the first, and proceed to mould after drying as in the upper case. The core can be dried rapidly over the gas burner.

5. How should the moulding sand be prepared?

Ans. Mixed with sweet oil to the same consistency as when water is used.

6. What are the advantages and disadvantages of oiled sand?

Ans. It can be used many times without re-oiling; there is no danger of "blow-holes" in the die, as when water is used; can be packed hard, so as to make a better mould. It has no disadvantages.

7. What are the qualities requisite for dental dies?

Ans. Non-shrinkage, hardness, toughness, smoothness, and melting at a low temperature.

8. Why melting at a low temperature?

Ans. So that oiled sand can be used. Zinc is poured so hot the oil is burned, and much odor results.

9. What alloy of metals has these qualities?

Ans. Babbitt metal.

10. Are there different formulas for Babbitt metal, and what one is suitable for detnal dies?

Ans. There are many formulas, and in order to cheapen it, lead is substituted for the tin, which ruins it for this purpose. The formula which has stood the test is—copper, 1 part; anti-mony, 2 parts; tin, 8 parts; melted in the order named.

11. If it lacks fluidity when melted, or is brittle, what is the remedy?

Ans. Add more tin.

12. What is used for a counter-die for Babbitt metal?

Ans. Lead, 5 lbs.; tin, 1 lb.

13. Why cannot pure lead be used?

Ans. It melts at a higher temperature than Babbitt metal, and when poured upon it adheres.

14. What precaution is necessary to further prevent adhesion?

Ans. Coat the die with whiting, and stir the lead until it cools somewhat.

15. Is it necessary to put anything on the model before moulding?

Ans. If the sand is freshly oiled, sometimes soapstone is necessary.

16. What sort of moulding rings are needed?

Ans, Made of boiler iron, 5 inches in diameter; 3 inches high.

17. How should the mould be made?

Ans. Place the model inside the moulding ring; throw in the sand around the sides, placing the fingers on the model to prevent striking it, and pack with a potato-masher, using the handle; keep adding sand; no need of sifting when packed hard; use the other end of the masher over the top of the model; fill even full.

18. How should the model be removed from the mould?

Ans. Allowed to drop out, and if it holds, jar against the edge of the moulding box.

19. How should the die be arranged for casting the counter-die?

Ans. Sink it into the sand, nearly to the border-line, of of the plate, and place a small ring, or a Bailey flask, over it.

20. Is there need of other metals for dies?

Ans. None whatever.

21. How many dies are needed in any case?

Ans. In many cases one only is needed, and when the second is required a second counter-die is not necessary.

22. Are these methods new, or have they been long in use? Ans. They have been in use constantly forty years, and have greatly simplified the setting of metal plates.

Is it not better to follow methods that produce practical results rather than cling to fine spun theories?—Ohio Journal.

FRACTURE OF THE SUPERIOR MAXILLA.

BY R. M. WALKER, D. D. S., CHICAGO, ILL.

As this is of much more rare occurrence than are fractures of the inferior, it may prove of some interest to your readers. The patient, a gentleman about twenty-five years of age, was kicked by a horse. Fortunately, he was not shod. Upon recovering from the shock sufficiently to know what ailed him, he said he felt something wrong in his mouth, and his first thought was that he had a mouthful of gravel, but on closer examination found, as he said, the whole side of his face knocked in.

I was called, in company with a physician, and upon reaching the house found his face considerably swollen, but not cut or bruised to any great extent. On examining the mouth I found the fracture to be on the right side from the canine back. The entire side had been broken loose up nearly to the floor of the antrum, and was turned over so the grinding surface of the teeth nearly touched the roof of the mouth, and was only held by the gum and tissues.

I had no trouble in pushing the broken part back to its place, and having him close his mouth, found he could do so fairly well. As it was late at night, and I had been called in a hurry, and not informed as to the nature of the case, I concluded to put a bandage around his head to hold the jaws firmly together till morning. In the morning I took a plas-

ter impression, and as he could only open his mouth about half an inch, it was no easy job; but I succeeded in getting a good one on the first attempt, and removed it without disturbing the broken parts. After getting one of the lower, I returned to the office and made a rubber plate covering the roof of the mouth and crowns of the teeth. On each side I vulcanized a wire, but so as to come out of the corners of his mouth, and then turned back toward the ears.

When this was adjusted, I fastened a strap from a skullcap to each wire and drew them up tight. This kept the plate perfectly solid, and he was able to eat a good square meal as soon as it was completed. After the first week he was able to remove and replace the plate himself, and after the second week I removed the wires. He then wore the plate for another week, and on removing it, I found everything perfectly solid, the occlusion perfect, and no sign of what had happened. About nine months have passed, and so far the teeth show no signs of giving trouble, though they are undoubtedly dead.—Dental Headlight.

CARBOLIC ACID.

[The following letter from Sir Joseph Lister, giving to carbolic acid as an antiseptic preference over the bichloride of mercury, will be read with interest and much satisfaction by many dentists who have persistently advocated it and used it exclusively for the treatment of devitalized teeth.— EDITOR.]

My Dear Sir: Your letter has been forwarded to me to this place. I have no hesitation in answering your question to the effect that the presence of the minute quantity of free chlorine cannot possibly interfere with the antiseptic action of the bichloride. If it had any effect at all, it would be to enhance the antiseptic efficacy. It might possibly make the solution act slightly more upon the steel of the instruments. I may remark that, as the result of recent investigations, I have for some months past abandoned the use of the bichloride in favor of our old friend, carbolic acid. It has been shown that a 1 to 40 solution of carbolic acid is really superior in actual germicidal power for such organisms as cause

inconvenience in surgery, as compared with any solution of bichloride that could be used for surgical purposes.

Believe me sincerely yours,

JOSEPH LISTER.

P. S.—For purifying instruments and sponges, and the skin of the part to be operated upon, a 1 to 20 solution of carbolic acid is, of course, used.

Glenelg, N. B., September 24, 1892.

Although Sir Joseph Lister has abandoned the use of bichloride of mercury in favor of carbolic acid, the former is still largely used, though we may expect many to follow the example of the great surgeon in giving it up. There appears to be some uncertainty as to the effect of heat upon aqueous solutions of mercuric chloride. In "Martindale," there is a statement, concluding with a note of interrogation, that "heat reduces the salt to calomel." Mr. Rushton Parker, one of the honorary surgeons to the Royal Infirmary, was anxious to be assured on this point, and as the results of many experiments, performed quantitatively, Mr. Johnson could not detect the slightest reduction of the chloride in such solutions as 1 in 500, 1 in 1,000, 1 in 2,000, etc., even after submitting to prolonged boiling. (From an extract of paper read by J. R. Johnson at a meeting of the Liverpool Pharmaceutical Student's Society. From the Chemist and Druggist.

ESTHETIC DENTISTRY.*

BY C. B. HEWITT, D.D.S., KANSAS CITY.

" For 'tis the eternal law.

That first in beauty shall be first in might."

In no place in the whole domain of science or art is there a greater demand for the intelligent study of the beautiful than in dentistry, either operative or prosthetic. The human form divine is often either beautiful or deformed, according as the dentist is educated or uneducated in the science of the beautiful. In the practice of our profession there should be the harmonious blending of the utilitarian with the esthetic, that our work may be not only comely to look upon, but a real comfort to those who are so unfortunate as to need our services.

^{*}Read before the January Meeting of the Kansas City Odontographs.



I am well convinced that the two are not always combined, as any casual observer may see. There has been much said along this line in regard to prosthetic dentistry, and I assure you much more might be said, as there is hardly a day that we do not feel a sense of shame for our brethren as we are compelled to observe the many ghastly specimens of our much-boasted profession.

But it is not in this line my thoughts have been wandering, but in the department with which I am more intimately connected, that of operative dentistry.

In the first place, I cannot but deprecate the practice so many have adopted; that is, the cutting away of the labial side of incisors and cuspids to gain access to approximal cavities in said teeth, and thereby marring the beauty of a set of teeth in a way that can never be remedied.

A dentist who does not know how or has not the skill to fill these teeth from the lingual side and leave the face of the tooth intact, should go and place himself under the tutorage of some good operator or stay in college until he can do that kind of work.

You say, "How if the caries has extended through until the enamel is broken down in front?" Then it is your patients' fault, not yours, that their teeth are disfigured for life, and you can have the sweet consciousness that you have done your duty as far as in you lies when you have stopped the trouble where it is and warned your patient against any further neglect.

Now as to crown-work, which all will admit is one of the greatest steps in advance that this decade has witnessed in the practice of dentistry. But here again is that same indifference as to personal appearance. What excuse there can be for marring the appearance of the mouth by inserting gold crowns on biscuspid roots, especially for ladies, I cannot see. And in the name of all that is genteel and in good taste, I would ask, Why do men outrage all sense of natural beauty by inserting gold crowns on incisor and cuspid roots? That their possessor may be known to all men as the man or woman with the golden tooth? Such dentistry, however skillfully performed, will not redound to the credit of our profession in the eyes of cultured people, as they have a

natural aversion to all such conspicuous jewels. There is no need of this when we can so nearly imitate nature's handiwork. The porcelain-faced crown with gold band comes nearer combining the useful and the beautiful than anything else, but in this way we may severely mar the natural appearance of the gums and also have the objectionable feature of the gold band at the gum line. With a good strong root, and when the molar teeth are in the mouth to take the force of mastication, there is no crown so natural as a simple Logan, if it is well adjusted. So with either of these later crowns I see no excuse to insert a golden headlight, and thereby bring a reproach upon what might have been a joy forever.

And again, bridge-work is many times inserted in such a bungling and inartistic manner, and with so little regard for the natural appearance of the mouth, that any one with an eye to the beautiful might very naturally mistake such an one for a worshiper of some unknown deity, who compelled the wearing of jewels in the mouth as a sort of penance.

So I say that in the minds of many of our good operators, men of more than usual skill, we have sacrified much of the esthetic part of our calling for the practical, making good and useful pieces of mechanism, so far as mastication is concerned, but very sadly deficient as a thing of beauty. Let me mention a case.

I met a lady on the street, a few days since, wearing three lower incisor crowns and one superior incisor; all seemed to be good pieces of work. But think for one moment of the hideous appearance.

Another thing I think worth mentioning in this connection is the little defects we so often see in our patients' mouths that are so easily remedied and so often neglected. I have reference to the irregularities of the teeth caused by mastication or elongation or slight fracture of the cutting edges of the incisors. In ten minutes time with a corundum stone and disks I can remedy such a defect, and it will add so much to the personal appearance of our patient and call forth words of praise and thanks that are always grateful to our ears. Just one illustration. Some few months since I did a considerable amount of work for a lady, and after filling

what teeth needed my attention I observed that the two lateral incisors dropped down slightly below the other teeth, giving an unpleasant expression to the mouth; otherwise the teeth were very even and pretty. I told her if she would allow me I could in a very few minutes make a very great improvement in the appearance of her teeth and not injure them in the least, and, of course, she readily consented. I gound the two elongated teeth to the length and corresponding shape of the others, and then handed her the mirror, and then the very first exclamation was, "Why did not some dentist do that long ago? for they have always been a source of annoyance to me." Such, I say, is one of the little things which add so much and cost so little, and raise the standard of our profession above the mere mechanics, but are so often The time was when I was afraid to grind a overlooked. I am not now, especially on the cutting edge. solid tooth.

I could enumerate hundreds of cases, but this one fully illustrates my point and shows how many times we could add something to the personal appearance of our patients when we neglect it, and think only of gold crowns, gold bands and gold fillings, until I sometimes think we are becoming dazzled by its brilliancy or its purchasing power.

Much more might be said along this line, but short papers have been requested, and I will close, hoping that I have said enough to elicit some discussion.—Western Den. Jour.

THE PAN-AMERICAN CONGRESS.—A Section of Oral and Dental Surgery in the first Pan-American Congress has been organized, and has secured the sympathy and co-operation of a large number of Dentists. Dr. M. H. Fletcher, of Cincinnati, is the chairman, and he is pushing the work forward with every prospect of success.

University of Berlin.—Prof. Miller is conducting the Operative Department of the Dental Institute alone, his colleague, Prof Paetsch, having retired. This throws a large amount of additional labor upon him, but it gives him full scope to introduce any such changes as he may deem desirable.

Ripans Tabules relieve scrofula.

ALVEOLAR HÆMORRHAGE.*

BY MR. J. S. HUGHES.

In laying before you a short paper on Alveolar Hæmorrhage, or perhaps more correctly speaking, excessive hæmorrhage after the extraction of a tooth, my object is rather to elicit the opinion of those present than to contribute anything new; and to start a good discussion. I feel quite unable to bring before this Society anything which its members have not heard of and practiced before, and if this paper is not as original as you would like it to be. I can only trust to your encouragement to smooth away the difficulties. Of all the emergencies with which we, as Dentists, have to deal, the one of excessive and prolonged hæmorrhage after the extraction of a tooth, or teeth, is the one that requires our prompt and most decided treatment. Fortunately, long continued and obstinate bleeding after the extraction of a tooth or teeth, is not a very common consequence, in fact, we may look upon it as being very rare considering the enormous number of times the operation is performed. the same time we must not forget that several fatal cases are on record, with the details of which I will not weary you, as they are to be found in the numerous text books and journals. This troublesome hæmorrhage is of a peculiar character; it is not a rapid arterial discharge immediately following the vascular rupture which the tooth extraction causes, but a continuous abundant flow of blood welling up in the empty socket. It is not the discharge of any considerable arterial trunk that may have been wounded but the passive bleeding of the entire disrupted surface from an inability of the vessels to accomplish a cure by the closure of their broken ends. This excessive bleeding is influenced by two circumstances; the state of the parts, and the predisposition of the patient; and it may be primary or secondary. Ordinarily, the bleeding ceases within half an hour after the operation, it is, however, more profuse when the extraction has been performed for periodontal trouble,

^{*} A Paper read before the Manchester Odontological Society.

but if it is all reasonable needs no further interference than slight pressure with the fingers, and washing the mouth out with ice cold water, to which has been added a little Phenate of Soda.

I will now, with your permission, consider for a few minutes, the various causes of this excessive bleeding, and will take first what is known as Hæmophilia, or the Hæmorrhagic diathesis, which is a subject of peculiar interest and far from being thoroughly understood. It may be the result of heredity, or it may be a temporary disposition to bleed which is present in some diseases, sea scurvy and purpura affording the most striking examples.

I had a case in which the bleeding occurred without there being any wound. Blood was rapidly flowing from between the canine and lateral in the upper jaw on right side; this had been going on without the patient seeking any aid for about two weeks, (so the patient said), the teeth were perfectly sound and fast. The patient was in a pitiable condition of exhaustion and bloodlessnes. I arrested the hæmorrhage by tightly packing between teeth a plug of cotton wool soaked in Fletcher's carbolized resin, the patient, however, died soon after. I found, on enquiry, he had been in the hands of a quack doctor, but, becoming alarmed, sought proper aid too late. Hæmorrhagic diathesis manifests its presence by a peculiar tendency to bleeding from any part of the body, or into any cavity, on the slightest provocation, and by the difficulty there is in arresting the hæmorrhage when it does take place. The dentist should always have before him the possibility of his patient being a subject of this diathesis, as it is not always possible to say that the patient in the chair is a bleeder or not; very frequently, those having every appearance of being likely to bleed, not doing so, and those who seem not likely, being just the ones to bleed the most.

Sir W. Jenner states that in these cases of hæmorrhagic diathesis, "the tissues are soft, and bruise easily. The blood is slow in coagulating, although it coagulates as firmly as in health; that is, blood is formed rapidly and there is a tendency to plethora of the small vessels, and when the patient is looking his best, injuries have the worst

effect, and spontaneous hæmorrhages are most likely to occur."

With the medical treatment of these cases we have nothing to do.

Patients, as a rule, are aware of the tendency, from former experiences, and many are so afraid that they positively refuse to have any more teeth out, preferring rather to suffer any pain on account of the alarming hæmorrhage following a former operation.

I do not think we need in every case refuse to extract a tooth from a bleeder, but precautions ought to be taken beforehand, by having the patient prepared by proper medical treatment. Immediately the tooth is removed, plug the socket in a way which I will shortly describe. Never remove more than one tooth or root at a time, and be very careful to wound the surrounding tissues as little as possible. A good precaution is to ascertain from a suspicious-looking patient if he has ever had any uncomfortable effects from an extraction before, but although we may often anticipate such effects by due preliminary enquiry, it too often happens that they come on suddenly and quite unexpectedly.

The sanguine temperament, characterized by moderate plumpness of person, and firmness of flesh, hair red or light chestnut, eyes blue, complexion fair and florid, skin soft and thin, the blood vessels large, circulation active, the pulse full and frequent, the countenance animated; such is the description of a patient liable to active hæmorrhage, and with whom it is always wise to plug the socket after extraction, and be on the safe side.

I will now briefly draw your attention to the second cause of excessive bleeding, viz., the state of the parts surrounding the tooth, or roots, caused by peridontal inflammation of an acute or chronic form. We are all too familiar with the state of the mouth in these cases; the excessive bleeding is here caused by the vessels having lost their natural tendency to contract through the long standing inflammation, and the blood its property of forming a firm coagulum or or clot. By primary hæmorrhage we mean the bleeding immediately following the removal of a tooth, and if excessive is easy of control. Plugging is not always neces-

sary, pressure with the fingers for a few minutes, and washing the mouth with ice cold water to which has been added a little phenate of soda is sufficient, but the secondary hæmorrhage is much more difficult of control, and usually occurs under the following circumstances:

A patient has a tooth removed, suppose we say in the early part of the day. Nothing unusual is noticed, the bleeding ceases in a normal manner; the patient goes to bed and wakes up in the night, or early morning, to find his mouth full of blood, and that a considerable quantity has been running from it during sleep. He feels faint, and, unless assistance is obtained, fatal syncope may supervene. The cause of this secondary hæmorrhage is of a constitutional, rather than of a local, character, and does not necessarily point to a hæmorrhagic diathesis. It seems rather to be dependant upon a diseased condition of the muscular coats of the blood vessels, than upon a want in the power to form a clot, as in these cases of secondary hæmorrhage we generally find a very large clot hanging from the open socket.

And herein lies another danger to the patient, for if by any means this clot (which I have seen of very large size, almost filling the mouth) became detached, and got into the throat of an exhausted patient, he might be choked before aid could be given. There is a particular form of this kind of hæmorrhage which occurs in women, when menstruation is imminent or in process. After the extraction, the bleeding ceases only to recur some hours afterwards, and becomes coutinuous and obstinate. These cases may often be recognized by their obstinate refusal to yield to local means, and when we have a case of this kind, I think it better to at once call in the regular medical attendant, and let him make the necessary enquiries, and treat the case, the bleeding doubtless being a vicarious manifestation of the periodic function.

With patients at a comparatively advanced period of life, profuse bleeding sometimes occurs owing to the coats of the vessels having become stiffened by the presence of a deposit within their substance, and they consequently lose the power of contraction. The treatment of this excessive hæmorrhage

after tooth extraction divides itself into two parts, the *local* treatment rightly belongs to the dentist, I think; the general to the *medical* practitioner, who in all cases of alarming hæmorrhage, or when local means fail, ought to be called in. Therefore it is only with the local treatment that I shall deal.

This essentially consists in the application of styptics, with continuous pressure upon the bleeding surface. belong to the astringent class of remedies, and may act either chemically or mechanically, the chemical styptics coagulating the blood exuding from the part, at the same time stimulating the tissues to contraction; whilst the mechanical, such as lint, cotton wool, or matico leaf, arrest the blood in their meshes or absorb it until it coagulates, and thus arrest the hæmor-Anything which would increase the wound, or add a fresh one, is contra-indicated; the actual cautery or ligature of an arterial trunk, such as the common or external carotid, are not to be recommended, as they would probably be worse than useles where the hæmorrhagic diathesis was well marked. Pressure on the carotid in the side of the neck by means of the thumb, or points of the fingers, might control the bleeding in an extreme case. The use of escharotics, like nitrate of silver, is attended with great disadvantage; the action not being limited to the interior of the bleeding alveolus, the surface of the wound becomes extended and the difficulties of the treatment enhanced.

Perchloride of iron is an objectionable application, the clot formed being soluble in the blood. Matico leaf is highly spoken of, but I think possesses no advantages over cotton wool, which, in simple cases, makes an admirable plug. Matico leaf contains no appreciable quantity of Tannic Acid, it is useless as an internal styptic, it has no real astringency; its action is simply mechanical as a plug, and for this reason, when rolling up the leaf, the right side should be kept outwards, the roughly reticulated under surface entangling the blood and forming clots. A plug of cotton wool, dipped in saturated alcoholic solution of Tannin, answers very well. It has a powerful local astringent action, owing to its power of coagulating albumen, and the clot formed by this drug is not soluble in the blood. Few remedies, however, are more successful than Turpentine; in my hands it has never failed.

It acts by coagulating the albumen of the tissues, and also by causing contraction of the smaller vessels. When administered internally, it passes readily into the blood and is very efficacious in bleeding from various organs of the body; it is also reputed to have the power of checking bleeding in the hæmorrhagic diathesis, and therefore I think we have in turpentine a most valuable remedy and one that is usually at hand in every house.

There is, however, another preparation, viz:—Fletcher's Carbolized Resin, which is a solution of Resin and Carbolic Acid in Chloroform, and this preparation has certainly a most perfect control over the hæmorrhage after tooth extraction. It is pleasant to use, and agreeable to the patient as far as taste and smell are concerned; it also quickly relieves the pain, which often follows the extraction of a tooth. It is best applied by soaking a strip of amadou, slightly larger than the root of the extracted tooth, with the carbolized resin, and packing firmly in the empty socket; I have not found it necessary to use any kind of compress or bandage.

And now briefly to summarize the treatment upon which the life of a patient may depend.

First, thoroughly clear the mouth, then syringe the socket well out with warm water, and phenate of soda. strip of lint, soak in some styptic, preferably turpentine, carry it firmly down to the end of the socket, and build this plug of lint up until it projects a little above the gum. Take a good sound cork and cut one end in the form of a saddle to just fit over the socket above the lint, place in position so that when the mouth is closed, direct pressure will be brought over the plug and alveolar margins. Leave the front teeth about half an inch apart, for this allows of swallowing with a certain amount of ease, and also of the introduction of small pieces of ice into the mouth, which is often very refreshing to the patient. The jaws should then be very carefully bound up with a four-tailed bandage, the patient placed in the horizontal position with the head and shoulders slightly raised, the room kept cool, and all hot and spirituous drinks avoided.

When all hæmorrhage has ceased, the bandages and compress may be removed, but leave the plug in the socket until

it loosens aud comes away itself; it must never be forcibly removed, as the bleeding would certainly be brought on again. With the carbolized resin, as I said before, I have not found it necessary to use any compress or bandage, which certainly is a great boon to the patient. I may say that I have not used anything else than the carbolized resin for some two years past, and have never failed in stopping some very bad cases of excessive hæmorrhage; in two that I can think of, the bleeding had been going on for quite two days. night ago I had a case, a female patient, I removed four incisor and one canine root in the upper jaw, in the early part of the day; the bleeding ceased before she left the surgery. About four o'clock in the afternoon she came back greatly alarmed, the bleeding had returned immediately on her return home, and had never ceased. On examination I found blood flowing from all the sockets, very freely from the I put in a plug of amadou, soaked in carbolized resin; the bleeding ceased in a few minutes and never returned.

In conclusion, allow me to impress upon you the great desirability where there is any suspicion of liability to hæmorrhage to plug the cavity at once, before the patient leaves the Surgery, with amadou soaked in carbolized resin; it will certainly prevent secondary hæmorrhage as this is the hæmorrhage most to be feared. Besides, it may save you having to turn out of bed in the early hours of morning, and may also save the patient from the kind attentions of his friends, which usually consist in getting him to swallow as much brandy and water as they can get him to take, and placing him in front of as big a fire as they can make. All this aggravates what they want to stop, and the longer a case is allowed to go on before it is treated, the more difficult it be-It now only remains for me to thank you for the patience with which you have listened to this imperfect paper, and I can only hope that if it has not been profitable, it may have been interesting.—British Journal of Dental Science.

A dentist must be patient himself, even though he may sometimes have impatient patients to try his patience.—A. WETZEL.



ODONTOLOGICAL SOCIETY OF PENNSYL-VANIA.

OUESTION OF THE EVENING.

"Should immediate root-fillings be practiced while purulent conditions exist at the apex?" Opened by Dr. Peirce.

Dr. C. N. Peirce.—This question, as stated, implies that there is some expeditious and comparatively certain method of either removing, or else rendering innoxuous the previously existing or recently acquired purulent condition at the end of the root, other than by the usual one, of either antiseptics, disinfectants, escharotics, astringents, alteratives, counter-irritants, desiccation, etc., and that without the use of these remedies, and in disregard of the septic conditions, the root-canal and crown-cavity can, immediately on discovery of this previously estimated unfavorable pathological condition, be filled, and that sole reliance for subsequent comfort and success can be had through either systematic conditions or local recuperative power; the inference being that this accumulated pus and septic condition which is recognized, is immediately, on the tooth being filled, to be either transformed into nutrient pabulum, building-material, etc., or else taken up by the absorbents and carried off as a waste product. I must confess that I have not confidence in unaided natural processes accomplishing these results, yet the inquiry upon which this discussion is based may be answered both in the affirmative and the negative, the correctness of the answer depending entirely upon the condition of the surrounding structures which are present at the time the thus affected root is to be filled; for instance, an established fistula penetrating the process and overlying the gum, through which the product of decomposition can find a ready means of exit; and after the canal has been placed in an antiseptic condition, filling is not only pardonable, but under some circumstances, desirable practice.

Through the fistula the apex of such a root could be reached and the purulent condition as readily overcome or corrected as by the application of remedies through the canal, while by the immediate filling after these prescribed condi-

tions were secured, the function of the tooth would be regained and the tissue at the apex protected from the danger of increased irritation by the ingress of foreign substances through the canal. On the other hand, if the conditions at the apex of the root are such as are frequently recognized, and the accumulated product kept at its minimum rate by an open canal, then to close this means of relief and discharge without first checking its accumulation. would, in my judgment and experience, result in an inflammatory condition which would be anything but agreeable to the patient, suffering continously, until relief was gained by either an artificial opening or through the pressure of accumulated pus, or absorption gave relief with a natural fistula. One or the other of these methods must be adopted to terminate the inflammation which will, with few exceptions, follow the abrupt closing of the only means of exit. These exceptions would, of course, be only in such cases as where the absorbents were sufficiently active as to overcome the accumulation of the purulent product; in that case it would be carried off with other waste material and the surrounding parts be thus freed or relieved from the septic influence.

There is another type where purulent conditions exist at the apex, and where, with a limited degree of safety, immediate root-filling may be practiced. This is in teeth where the pulps had died without exposure. The cause of devitalization not being pertinent to the question, I shall not dwell Decomposition of pulp has followed, with only a limited degree of irritation in the pericemental membrane at the apex of the root, but yet sufficient to establish a thickening of this root-covering, with some exudation, but both have been controlled by favorable systemic and local conditions, with activity of absorbents. The canal on being opened into is found filled with a yellowish fluid, but the parts around the apex have, for months probably, tolerated this condition, and would for months, and it may be years, The opening into the crown and root has been made, not to relieve suffering, but to prevent further discoloration of the crown. In this case, or in most of these cases, it is quite possible to cleanse the root, dry it as completely as possible, securing an absolute antiseptic condition

so far as atmospheric germs are concerned, and fill at once with little or no danger of subsequent unfavorable conditions; and yet such treatment is not desirable practice.

Now, in these several conditions which have been indicated, where undoubtedly a purulent product exists, the remote but at one time quite general practice was to fill immediately, and then with a drill make an opening into the root-canal or pulp chamber from just beneath the gum margin. This treatment has saved thousands of patients from discomfort while they yet had purulent conditions existing at the apex of the root, but is it good practice, except in rare cases?

Dr. Register.—Since I have been using large quantities of hot and compressed air in connection with atomization, my results in practice have been so different that I feel great good has been done—certainly to my patients.

In regard to the question, I do not know whether it refers to indolent abscess, or whether to putrescence in the pulp-chamber. If it is to putrescence from devitalized pulp, and there was no fistulous opening, I should make use first of a germicide, and then arrange the dam in place and use the hot air in large quantities, so that desiccation is thorough, then fill it while it is in that sponge-like condition. I think that immediate root-filling is indicated; certainly from clinical experience. It has been my experience that it is good practice. It has been my impression that this carbonaceous matter that exists in a devitalized condition is the cause of the subsequent trouble with teeth of that character. Some have the idea that if the apex of the root be closed the trouble is avoided, but I think that is an error.

Dr. Thomas.—It may seem presumptuous for me to say anything in regard to root-filling where there has been a discharge either from the canal of the tooth or from a fistula. It has become a question in practice—How long is a dentist justified in treating that root to stop the discharge? Experience has accumulated in capping exposed nerves. It was advocated that the nerve could be capped and the tooth made perfectly useful, yet it was a common thing for patients to come to me suffering from the treatment. In a case of pericementitis the patient may not come back, and possibly septic matter may have infiltrated along the tissues and

formed a fistula. The tooth is treated, but there is an increase of inflammatory symptoms, infiltration and another abscess. It may be treated again, but only after the formation of a fistula does the patient get relief; consequently there is no reason to visit a dentist, and probably there is no attempt to see one, and after a while it has gone so far that the process between it and the cuspid tooth has necrosed and the tooth must be removed. Is it good practice, or how long is it justifiable in a dentist to continue with such a tooth? and I would like, individually, to know whether you can make a tooth of that kind perfectly healthy and do away with the discharge; or how long would it remain so, or how much security can you give a patient that it will be a perfectly and permanently cured tooth? It grieves me to have a patient come for extraction with a filled tooth treated for abscess with a large fistula supposed to be cured. What can I do, and can I make it a perfectly well tooth? How long. are you justified in treating it for that purpose?

Dr. Truman.—It does not appear to me that there is anything in this question. It is, Should you fill a tooth while it is in a purulent condition? No; of course you would not. That is the only answer I would give to that question. But in the broader sense, I presume it is meant, will you do anything to a tooth which has pus in the canal? Dr. Peirce has taken up that point and handled it very well; but Dr. Thomas has brought up another—Can we fill any tooth that has once had pus at the end of the root? I think you will agree with me, that pulpitis necessarily affects the pericementum. I do not think it is possible to have septic conditions in the pulp and not affect this membrane and increase further the development of pus; and wherever there is pus there must be destruction of tissue and a necrotic condition.

I have long entertained the idea that it was absolutely impossible to produce a healthy condition where pus has existed for a lengthened period at the end of the root. Immediate filling of such a tooth is, to my mind, impossible. We must change the conditions. If the root be necrosed, the dead tissue must be removed. If necrosis has not commenced, and the pulp is simply decomposed, it must be treated. Dr. Register says he accomplishes this by dry heat.

I question this conclusion, as the heat required to destroy micro-organisms would destroy the tooth-tissues

The whole territory of the dentine is filled with organic matter. It is in a decomposed state, and becomes a factor for future trouble. What is to be done with it? Years ago I recommended that it be coagulated, and that for this purpose chloride of zinc be used. It was said in answer, that coagulation would never extend beyond the open mouths of the tubes. It has been demonstrated that it can be carried into the tooth. We can only approximate health in the treatment of many cases. When the destruction of the pericementum has been reached, we have arrived at a surgical operation—cutting off the end of the root. Until that is done there will never be a healthy tooth in the mouth.

Dr. Register.—I rather hesitate to talk in reference to anything performed in my own practice. I offer the statement that I rarely, at the present day, have a fistula to treat. Only yesterday a lady came in to see me. She had a very bad molar and was in a very delicate condition. The central incisor had been treated for a number of years in the usual method. I operated on the tooth but once. It had a fistula and a gumboil at the end of it. I first washed it out with an atomizer, and after that by dilute sulphuric acid. this in about an eight-per-cent. solution, as a solvent to dissolve the carbonaceous matter that filled the tubulated structure of the dentine. I then followed this with Labaraques's solution. If it has a fistula, it is given a treatment with acid of four-per-cent. solution.

Incidents of practice were then taken up, and opened by Dr. Peirce, who said—

I have a little matter here of some interest. There have been some questions in the journals in regard to the influence of abnormal conditions of the teeth in neuralgia and other disturbances. Some months ago a lady who had been present at one of my lectures on the influence of the teeth on facial neuralgia came to see me. She had worn an artificial denture for eight years. Upon examination of the mouth, I found on the left side a large tumor, for the accomodation of which the plate had been cut away. On passing a lance into the mass, an enamel surface was at once detected. On

a free incision, opening it for the introduction of a pair of forceps beaks, an ordinary three-cusped, compressed-rooted third molar was readily removed. On further examination. other teeth were recognized, which, upon removal with the forceps, proved to be three additional, supernumerary in character, united with apparently a membrane of connective tissue. On placing the four teeth together in the same relative position they had occupied in the cyst, the upper and larger one, the representative of the normal third molar. had been embedded with its crown towards the cheek. next in size was closely adapted to a depression in the larger one, and at a slight angle to its vertical axis. The third in size was, in similar manner, fitted into a depression of the second in size, and in the same line deviating from its verticle axis; while the fourth in size, not much over a sixteenth of an inch in length, or rather between a sixteenth and an eighth, fitted into a well-marked cavity in the third or preceding in size and description. The crowns of these teeth all possessed multiple cusps; the largest one had, as above stated, the three cusps of an ordinary third molar, while the second in size had quite a pronounced central cusp encroaching upon a proximal surface, with three cusps on the other proximal side and one on each side of the more central cusp. The third tooth in size had four rounded cusps, with a deep sulci in the centre of the crown. The fourth and smallest of the group resembled more an inferior bicuspid, with the cusp on one side much more prominent than that on the other. both cusps, however, being divided by slight sulci. point of most interest to the patient was that in the removal of these abnormal growths the suffering, which had been severe and of long duration, was entirely relieved.

Dr. Darby—I saw an interesting case a few days ago. A lady came to me with a tumor inside the cheek as large as a thimble. In a very solemn way she said she wanted to consult me about something in her cheek, stating that her father had died with cancer, and, while she was not frightened, she thought this was of the same character. I examined it and found a top-shaped tumor protruding into her mouth just opposite the molar tooth of the anterior jaw. I asked her if she was not in the habit of drawing her cheek in by suc-

tion, and she replied she thought she was. I found she had lost the second molar, and the wisdom tooth was in position, and that the suction had produced the tumor. I told her I did not think it was a cancer, and procuring a piece of floss-silk, I made a loop and passed it around it to shut off circulation, and told her to report to me if anything strange happened. Within the next few days I received a letter from her saying that the cancer had dropped off in her mouth, and she was convinced it was not malignant.—In. Den. Jour.

NEW MODE OF USING NITRATE OF SILVER.

To the Editor of the International Dental Journal:

SIR—I send you enclosed a piece of blotting-pad which has been saturated with a forty per cent. solution of silver nitrate. I have been trying lately numerous experiments to have a form of this caustic which could be applied to children's teeth without the direct application of the crystal, which is always attended with some danger, and liable to stain the fingers, napkins and instruments.

This preparation seems to work very happily, and is of abundant strength for all purposes required in the mouth, whether for cauterizing the soft tissues or acting on the hard. It is well known that nitrate of silver is very soluble, dissolving in its own weight of water. This strong solution I tried first on some short fibre of cotton, but found, when dried, that the cotton was entirely destroyed. This strength—forty per cent.—is about as strong as it can be used without some destruction of the fabric. The pad, thus prepared, can be cut into small pieces and be always ready for use, if it be kept dry.—C. N. Peirce.

SIR RICHARD OWEN the greatest of all anatomists is no more. Sir Richard Owen, the author of some of the most widely known works on comparative anatomy, died in London, Dec. 17, ult., at the age of 88. He was not a theorist, or a man possessing striking originality of views, but as a patient, painstaking investigator of fact, and as an analyst of that which was discovered in his special field he had no peer.

Southern Dental Journal

A MONTHLY PUBLICATION

DEVOTED TO THE INTEREST OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. Johnson, 306 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to Southern Dental Journal., 27 E. Hunter St., Atlanta, Ga.

Editorial.

PROFESSIONAL ADVERTISING.

"The graduate who violates his promises and becomes an . 'advertiser,' ought in all decency surrender his diploma to the college he has disgraced." The above, clipped from an exchange, is a splendid text for a sermon on this muchneeded reform. This violation of the code of ethics and professional decency becomes more frequent and voluminous each day, and we have no remedy or protection from the There is no use to appeal to such a man's reason. He had lost all professional character—all desire for improvement or progress, and became thoroughly selfish, before he made up his mind to pursue such a course. The allusion above is to those men who openly and boldly, without any regard to professional ethics or decency, flaunt great dry goods style signs in the daily press, or immense showy boards about their door fronts. From an editorial in the International Dental Journal, we quote the following:

"The definition of the written and unwritten code is, however, not as clear as it might be made, judging by the means taken to promote individual gain by publicity.

The need of a true definition is nowhere more apparent than the difference made in the code of ethics between the sign on the door and the card in the daily newspaper. These may, for all practical purposes, be exactly alike, yet the one is accepted as very proper, if confined within certain limits as to size, while the other is usually regarded as very unprofessional. Exactly why a sign with Dr. John Doe, Dentist, placed to inform the thousands who perambulate the street should be considered right, while Dr. John Doe, Dentist, in the columns of a daily paper should subject Dr. Doe to censure under the code, is not clear. It seems but a question of numbers.

We are not disposed to quarrel with the mythical personage alluded to; indeed, he may be found in excellent company in many lands, and his bold assertion, that in so doing he is not violating professional usages, may have much to sustain it.

The question involves nice distinctions in ethical law. Yet it must be apparent to the most careless observer that the motive which influences John Doe to send his card to the newspaper is not strictly professional. The idea is clearly manifested in the action that he desires to make his name familiar as a household word, and to do that quickly rather than walt for the recognition of ability to give him an assured position in society."

Our ideas do not fully agree with those expressed in the above quotation. It is true, the definition is not exactly clear as to the limit of size of a display sign. But certainly, to our mind, there is nothing unprofessional, and custom has. made it admissible to insert a card in a newspaper announcing occupation, name, address and office hours, that people may know where you may be found. Nothing more than this can with propriety be inserted, and even this should be set in modest type, in a column provided for such notices. If the door-plate is admissible, the modest card in the newspaper is admissible. The object of both are the same—to let people who want to find you know where you are. superiority is claimed nor special inducements held out. the code is so strict as to require the candidate for favor in a community to shut himself up in secrecy, tell no one of his whereabouts, and wait for reputation, the code is unreasonable and should be revised.

It is, however, high time thought was being expended to

remedy the evil of degrading advertising. In England they strike a man's name from the register who goes beyond the limits of professional decency, and when they get rid of those who were registered before the act of 1878, and get the co-operation of foreign countries, they will very near have it under control.

The National Association of Dental Faculties should recommend that the colleges enter a clause in their diplomas declaring them forfeited when used unprofessionally. Then if the National Association of Dental Examiners should recommend the examining boards to demand the surrender of licenses in all such cases, we would be one step nearer a solution of the question.

AN ADDRESS OF WELCOME.

The Hon. John Temple Graves of Georgia, will deliver the address of welcome to the assembled dental congress on behalf of the laity.

Mr. Graves is an orator of wide reputation, and we confidently expect that this will be one of the most eloquent and powerful addresses ever delivered before a scientific body in this country.

The closer union of the interests of the public at large with those of the professions is a thing cordially to be desired, and it is hoped that this great gathering will in a measure overcome the prejudices of the people antagonistic to the professions.—Dental Review.

The expectations expressed above will be fully realized at the opening of the dental congress. Mr. Graves is one of Georgia's own, and the congress has been fortunate in securing a promise of his presence for this occasion.

New York, it seems, will soon have a dental school worthy the great city, and one of the first of its kind in the world.

A very commodious and suitable building has been selected, and, we learn, some of the best men, both in this country and Europe, are considering the professorships. It will open with a Spring course in April, but the regular lectures will probably not begin before October.

It is said there will be a staff of above fifty teachers, each branch being taught by ten or fifteen men. We hope all their anticipations will be realized. Good schools and a high grade of teaching are what we want. With such we need have no fear of ever being crowded.

THE COLUMBIAN DENTAL CONGRESS.

Do not forget that the date of meeting has been changed, the date being now August the 14th to the 19th.

State Committees on Finance and Conference must not forget that the time is rapidly passing by. You were honored with appoinments because it was presumed you would be a worker. Prove your worthiness by your deeds.

Dr. Jno. C. Stony, of the *Texas Dental Journal*, stepped out of his editorial harness, and in again between issues. "When once an editor, always an editor." We are harnessed again ourself. Shake, brother Story.

From a letter received from Dr. J. E. Wyche, Secretary of the North Carolina State Dental Society, we infer that great preparations are being made for their coming meeting, to be held May 23d to 26th. A full programme will appear in our next issue. The proceedings will be published in full in this journal.

Dentists of Georgia, are you preparing papers for the State Dental Society, which meets in Atlanta on the 9th of May? If you are not preparing to add to the interests of the meeting, make arrangements to go, and if not a member become one. This Society belongs to the dentists of Georgia, and every practitioner, however remote or modest, should take enough interest in it to, at least, join and attend its meetings. Come. If you haven't anything to contribute yourself. Come, and profit by the teachings of others.

It is a well known fact that burnishers are the most difficult of all tools to keep in a perfect condition. It is also a fact, that no finish equals a burnished finish on a well condensed cohesive gold filling, if it be done with a well kept burnisher in skilled hands. Dr. R. B. Winder once gave me instructions in using and keeping a burnisher in good condition. Get a very thick piece of sole leather from a shoe maker, and with a sharp knife cut a small grove the whole length of the piece. Sprinkle rouge in the groove and rub briskly until the burnisher is perfectly bright. Keep a small piece of white soap convenient, and before using the burnisher, rub a little of this on the filling. The plugger marks and other scratches must be removed with pumice stone and polishing strips, after which use the burnisher with a light touch—pressure is unnecessary, and the result will be a surface that can be obtained in no other way.

Communications.

Editor of the Southern Dental Journal:

I have been made, painfully aware, I may say, of the necessity for dental surgeons in the army, since the establishment of a Post at this place, by calls of the ordinary soldier, who being unable to pay for operations necessarily extensive through lack of opportunity and means to have their teeth operated upon at the proper time. With the next Congress lets start this subject afresh and push it with unanimity until we succeed in having a bill passed authorizing it. I think it will be necessary to have the co-operation of the surgeon-in-chief of the army. In a few days I will address a letter to him on the subject, and acquaint you with his reply. I am glad the Columbian Dental Congress will take hold of the matter. It has been one much neglected on our part. What is done must be done in concert. Dentists in every congressional district in the United States, and State societies must present memorials to their respective congressmen and senators on the subject. Some State associations are to meet this month; let them pass upon the matter, and as each State association meets let it act in accordance with the first or preceeding meeting. And let a copy of the resolution from each State be sent to each congressman and senator from that State. It is not necessary to have uniformity in the wording of the resolutions.

would look like a prearranged affair, but let each association present its own resolution in its own way. There would be no trouble, I am sure, of getting the co-operation of each Post surgeon throughout the country in this matter. Let each State association act at its meeting this year. And instruct the secretary to hold the resolution until, say December, then send it to Washington while Congress is in Session. Let one go in also from the Columbian Congress, and be accompanied, if necessary, by a committee comprised of one member from each State in the union.

Yours,

Atlanta, Ga.

B. H. CATCHING.

To the Editor of the Southern Dental Journal:

SIR—The Eleventh International Medical Congress will be held in Rome, 1893, beginning the 24th of September and continuing until the 1st of October.

The Committee on Organization, following the precedent established in London, 1881, has provide for a section Odontology. As America has contributed pre-eminently to the scientific progress of dental surgery, it is hoped that the dental profession in America will be creditably represented; all reputable practitioners are entitled to membership in that section.

The time chosen is the most delightful of all the year, and to those who have never visited the "Eternal City" the meeting of the Congress will afford a rare opportunity.

The North German Lloyd Steamship Company has an established line of first-class steamers to Genoa, making the passage in less than eleven days. It proposes to reduce the fare to Genoa by twenty per cent., and the return trip by ten per cent., to those attending the Congress.

The French Railway Company has also offered a reduction of fifty per cent. on its fare.

Dr. Norman W. Kingsley, 115 Madison Avenue, New York, has been appointed Member of the American National Committee for the Promotion of the Interests of the Odontological Section. All communications in reference to that section should be addressed to him.

A. JACOBI, M.D..

Chairman of the American National Committee.

Societies.

THE ST. LOUIS DENTAL SOCIETY.

The annual meeting of the St. Louis Dental Society was held at the office of Dr. J. B. Vernon, Jan. 3, 1893. The following officers were elected for the ensuing year:

President, Dr. De Courcy Lindsley; Vice-president, Dr. J. Warren Wick; Cor. Secretary, Dr. William Conrad; Rec. Secretary, Dr. J. G. Pfaff; Treasurer, Dr. Henry Fisher.

Committee on Publication.—Dr. L. A. Young. Dr. P. H. Isloeffel, Dr. C. L. Pepperling.

Committee on Ethics.—Dr. H. M. Baird, Dr. A. J. Prosser, Dr. M. C. McNamara.

Committee on Membership.—Dr. W. N. Morrison, Dr. C. L. Hickman, Dr. J. H. Spalding.

SPECIAL NOTICE.

The St. Louis Dental Society will hold a three days' Clinic March 15, 16, and 17, 1893. A general invitation is given for all dentists to attend. The Committee having charge of Clinic already promise an interesting meeting.

Drs. A. H. Fuller, J. Warren Wick, W M. Bartlett compose the committee.

WM. CONRAD,

321 N. Grand Ave.

Cor. Sec'y.

Publisher's Notices.

By request we print in this issue an open letter from Mr. Chas. Marchand, in reply to an article by Dr. Jacobi. The letter is in vindication of the merits of peroxide of hydrogen and explains itself.

Our readers who are afficted with deafness should not fail to write to Dr. A. Fontaine, Tacoma, Wash., for his circulars giving affidavits and testimonials of wonderful cures from prominent people. The doctor is an aurist of worldwide reputation. See his advertisement elsewhere. THE SOUTHERN DENTAL JOURNAL will be issued on the 15th of each month instead of the 1st and we will endeavor to have it come out promptly at that time. We propose to report most of the Southern Societies, and the JOURNAL will be enlarged to give sufficient space for this purpose when it becomes necessary.

We wish to call attention to the advertisement of the Bradycrotine Co., which appears in this issue. This wonderful headache remedy has been used with splendid success by prominent dentists in this city, in the treatment of pulpitis, pericementitis and all inflammations and ulcerations about the teeth and gums. It reduces the circulation to a normal state and relieves the pain almost immediately. Perfectly harmless.

EDGAR PARK, D. D. S.

Dr. Edgar Park, died at Middleton, New York, August 12th, 1892. Dr. Park was born in Wainfleet, County of Welland, Ontario, April 21st, 1840. His family were English people. He entered upon a course of study at the Ohio Dental College in 1864, and graduated at the Missouri Dental College in 1869.

He was associated in practice with Dr. W. W. Allport, of Chicago, for a short time; also with Dr. H. J. McKellops of St. Louis. In 1873 he was happily married to Mary C. Fisk, an accomplished and lovable daughter of General Clinton B. Fisk.

Dr. Park was devoted to the profession and was often heard to remark, "If I were worth a million, I would never give up the practice.

Miscellaneous.

Southwestern Ohio Dental Society, Camden, May 16, 1893. World's Columbian Dental Congress, August 14, 1893.

Northern Ohio Dental Society meets at Akron, May 9, 1893.

Anneal nerve broaches in a glass tube.—G. P. Terry.

The Georgia State Dental Society meets in Atlanta second Tuesday in May, 1893.

Pyoktanin is very useful for the treatment of excoriations about the corners of the mouth,

Mississippi Valley Association of Dental Surgeons—the oldest in the world—meets in Cincinnati March 8, 1893.

Use a solution of bichloride of mercury and ether for drying out root canals; it is better than alcohol.—L. J. MITCHELL.

ELECTRICITY IN WAYBACK,—"Well, I've heard of red currants and white currants, but I'll stop chewin if I ever heard of alternating currents.—Truth.

Good proof readers are rane; because a good proof-reader must be a man who costs less and knows more than the man whose work he is reading.—Puck.

Remember that "whether the accumulations are of mind, purse, or other possessions, man lives as he shares," and help elevate your chosen profession as you have been helped by others who have gone before.

"What is the matter with the baby?" asked a lady of a little girl whose baby brother she had understood to be ailing. "O nuthin' much," was the answer. "He's only hatchin' teeth."

SALOL has been at last obtained in solution as a pleasant, palatable liquid. Elixir of salol as described, in a solution by mechanical means only, of five grs. of salol in each desertfulspoonful, making a palatable liquid, the advantages of which can be clearly seen in the fact that it renders administration of salol very easy, especially to children and those who cannot take powders or pills.—Medical Era.

The dentist who is worthy the name of professional man, must be able to diagnose disease of any of the tissues of the oral cavity before it is too late for cure. He should recognize inflammation of the osseous structure in advance of necrosis, and be able to use the proper remedies, both local and general. before a resort to surgical means becomes a necessity.—Ed. Dental Practitioner.

ARTIFICIAL TEETH.—Those who imagine that the care of the teeth and the replacement of the natural grinders with false ones is "something new under the sun" may be surprised to learn that artificial teeth were made of ivory, placed on plates of the same material, and held together and in place by gold wires and rivets 500 to 1,000 years before Christ. Herodotus, "the father of history," tells us that the Egyptians of the fifth dynasty understood the diseases of the teeth and their treatment. There are several passages in history to lead one to the belief that both Cæsar and Anthony wore artificial teeth: The date of the introduction of false teeth into Europe is uncertain. They were known in England as early at least as the time of the discovery of America. The Matheniatical Jewel, putilished in 1585, contains an account of Sir-John Balgrave, "who caused all of hys teethe to be drawne out, and after had a sett of ivory teethe in agayne."—St. Louis Republic.

AN OPEN LETTER

FROM

CHAS. MARCHAND, Chemist and Graduate of the "Ecloe Centrale des Arts et Manufactures, de Paris," (France.)

TO

PROF. A. JACOBI, M. D., OF NEW YORK. Published by the Archives of Pediatrics, January, 1893.

My attention has been called to an article read before the "American Pediatric Society," at Boston, May 4th, 1892, by Professor A. Jacobi, M. D., and published in the December number of *The Archives of Pediatrics*. This article is entitled, "Note on Peroxide of Hydrogen," and purports to be a "warning."

The learned writer at the beginning enters into a diatribe regarding proprietary medicines of all kinds, and endeavors, by an extravagant list of diseases, (many of which have never been mentioned by me as being connected with the subject,) to convey the impression that, peroxide of hydrogen (medicinal) is a "nostrum," and that the manufacturer of this article is to be classed among "quacks and patent medicine vendors."

He then commiserates the "immense number of unsophisticated medical men all over the country for their relative inability" to successfully "cope with the misery surrounding

them," intimates that the "trash" written regarding peroxide of hydrogen (medicinal) is not published for his hearers, who, being writers and teachers, are above the common horde of medical practitioners; with this compliment to his hearers and most uncomplimentary reference to an "immense number" of his professional brethren, Dr. Jacobi proceeds to mention several cases of diptheria, which having been apparently greatly relieved by the use of peroxide of hydrogen (medicinal), finally were cured under the use of lime water, as a spray and wash.

The inference drawn by the writer of the article in question is, that the peroxide was an "irritant" and had been of

more harm than good.

It is not my province as a chemist to enter into a medical discussion with the learned doctor, but I would like to ask if, in his opinion, a case of diptheria can be treated successfully with lime water only, and whether in the cases he cites, it is not possible that the peroxide treatment was an important element in the recovery of these patients. I would also inquire whether the intemperate and in some instances personal allusions to myself and the preparation which I manufacture, are in all respects the outcome of professional investigation, and not the result of a desire to advertise himself by discrediting a remedy of which the therapeutic value has been proved by thousands of physicians who, though they may be "unsophisticated" from Dr. Jacobi's standpoint, are nevertheless known as eminent and honored professional men, all over the world.

The drift of this article is seemingly an attempt to prove that Marchand's peroxide of hydrogen (medicinal) is injurious.

In confirmation of my sincere belief that the claims made by me of the harmless character of my medicinal peroxide of hydrogen are true, I am willing to submit myself to a thorough test upon my own throat by spraying it with a twenty-five per cent. solution of Marchand's, peroxide of hydrogen (medicinal) instead of a five per cent. solution as alleged to have been used by the learned doctor, for the same continuous number of days mentioned by him; and if any ulceration appears, or if the repeated applications of the remedy "does give rise to actual diptheria," as he states may be possible; then I am willing to acknowledge that he is right. This test may be made at any time with the utmost publicity.

I make this proposition in good faith from a scientific standpoint, and will expect Mr. Jacobi to make the test in the same spirit or acknowledge that he does not desire to do so.

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AN OPEN LETTER TO A YOUNG FRIEND.

MY YOUNG FRIEND:—This is the second of a series of letters I promised to favor you with during the period of study and preparation for practice.

It is now several weeks since you matriculated and commenced college-work. I hope you are satisfied with the outlook for advantages, and pleased with the professors and demonstrators, and may find all things favorable for rapid and profitable advancement in the study of dentistry; that you may be able to grasp readily and hold on to every good idea advanced by those whose privilege and duty it is to instruct and assist you in obtaining knowledge preparatory to practice, and not only to practice and practice successfully, but to become a teacher of others if it be your ambition and desire. Right here I will advise you to pause and reflect and determine to your own satisfaction if you are right and wise in the selection of a vocation. If you have any doubts on the subject, or question your ability and disposition to study and practice dentistry successfully, then stop right now, advance not a step further, but retrace your steps and take hold of something else that may suit you better. Plodding along, hoping to become enthused and interested on the subject ultimately, would be an unwise proceeding and time lost, possibly never to be regained, and cause sad regrets in after years, as many before you have experienced. The country is overstocked with inferior dentists, and there is an annual increase for no profit to themselves or good to communities. What we need and want is, a liberal increase of a superior class; there is room yet for such, and they will be welcomed, and when established, will be appreciated, liberally patronized and well compensated for their services. But not so with an additional increase of an inferior class. As I advised in first letter, be sure you are on the right line and have convictions to sustain you.

The pulpit has robbed communities of many men to no profit that would have been useful and played their part well and creditably as field-laborers, or in mechanic shops. So it is with the professions of dentistry, medicine and law, they often captivate and entice to detriment and no profit.

Never lose sight of the fact, that "it is the man that makes the professon, and not the profession that makes the man."

A shoemaker, skillful and meritorious, plying his trade in some secluded nook or corner of an unfrequented alley-way, is more meritorious and useful to community, and more to be respected, than a professional man unsuited to his calling, who may be favorably located on a popular thoroughfare with sumptuous outfit and surroundings.

No man can be useful or meritorious in any profession unless he is suited to it, therefore the importance of considering well and counting cost before venturing too far.

To succeed in obtaining knowledge quickly and be profited, you must take hold with faith, willingly, and receive of each instructor whatever he may offer of theory or practice, never questioning but the entire teaching is good and true as gospel. What you want is to prepare for graduation, and to be truly esteemed by all who sit in judgment and are to decide the question of capacity and merit as worthy a diploma.

Let it be your purpose and ambition to prepare to begin, and to do so successfully, you must accept instruction as offered and be thankful, whether it be truly orthodox or not, you will be none the wiser. It will be the best you know anything about. Much of it will be good and may possibly prove valuable to you through life.

Time and experience will enable you to separate the true grain from the chaff. To lop off and add on will be your

privilege in practice, and until you do much of such work you will not be skillful nor appreciated as an operator.

Listening to a course of lectures is like listening to a series of sermons delivered by sundry preachers. Some will be full of thought, argumentative, eloquently delivered and richly entertaining; others, just the reverse, yet all may profit if reverently respected and rightly digested. Accept, therefore, of teachers whatsoever is offered. It will be all you have any knowledge of and will assist you in starting, that is what you need, and should be the all-important consideration with you. You can and will, if you have ability, after you commence practice, gradually correct or discard errors obtained at college—it will not only be a privilege but a duty.

With your capacity to estimate character and measure men for their worth, and as they merit, you will or may sometimes be surprised, amused and disgusted with the display of weakness, egotisms, prejudice and great want of conservative spirit you will realize in some professors and instructors (not all), and how anxious and painstaking they will be to have you think they know it all. Dogmatical in the extreme. Such, though far short of the high mark of professional excellence in point of knowledge and capacity to instruct, are sometimes endowed with right good ideas and impart them instructively and to advantage, therefore, tolerate respectfully, watch for the good and treasure it when obtained.

Dental colleges, like other institutions, frequently fail to fill all the chairs of instruction with first-class educators, unfortunate and to be regreted, but not censurable.

In a practical point of view you will derive more benefit at the hands of demonstrators and clinic instructors (if well selected) than from the regular text-book. Professors, whose province it is to impart to you recorded theory and non-demonstrated practice, designed for benefit, must be accepted and respected. All harmonizes (or should) and blocks in rightly in making up the whole of instruction for beginners. Look up to and respect each instructor to the full measure of his position and merit, and profit as best you may and can, by their individual and collective teaching.

You have just commenced to ascend the cliff, and to you,

it possibly seemeth a long way up and may prove a tiresome journey, but persevere and never look back or falter, nor wish it could be accomplished short of present requirement. Three courses of lectures, better for you three than two. When you have graduated and practiced several years you will realize the good and importance of three courses of lectures instead of two, (the old custom) and possibly may, at times, silently wish you had been blessed with the privilege and benefit of five or six instead of three.

Knowledge of any science or subject, to be profitable or pleasant, must be perfect, and perfection, you know. is not the growth of an hour or a day, but months and years are often requisite even in small matters.

You are yet in the morning of life with the possibility of a long future before you, but you have no time to lose, if you wish to succeed and excel. Be dilligent and faithful, with a fixed purpose in view, and you may hope to succeed and get through all right, and when reflecting upon the months and years appropriated, will not, I presume and hope, count any time as lost.

In the beginning of your pursuit of professional knowledge determine to ignore prejudice, in favor or against this or that material, remedy or mode of manipulation in practice. Study to be eclectic and a true conservator in every branch and stage of practice. Follow and pattern after good and true men, professionally, religiously and otherwise, (always safe to do so) but be no apist in practice.

Never advise or consent to the extraction of a natural permanent tooth, if possible to preserve it by treatment without too great cost, trouble and discomfort to patient. The wholesale extraction of teeth as is practised in this country at present, is censurable and criminal, and should be lectured against in every college and repudiated by all good men in the profession.

I hope it is your desire and will be your purpose and ambition to be truly an *oral surgeon*, prepared to treat successfully, if possible, the natural teeth and adjacent tissues and preserve in a normal state as nearly as possible, from infancy to old age; do this, and you will have done much and filled a large measure of professional usefulness. Study dentistry

carefully as a whole and thoroughly prepare for general practice, but line out a specialty according to fancy and talent, and work on that line specially. Specialties will be the order of practice ultimately, possibly before the close of another decade.

Will write you again soon.

Yours truly,

OLD PRACTITIONER.

PRESIDENTIAL ADDRESS.

CHAS. ECKHARDT, D. D. S.

Members of the Louisiana State Dental Society:

Gentlemen.—Upon me devolves, as President of your Society, the pleasure, as well as the honor of addressing you upon this occasion, the fourteenth year of the existence of our organization.

The untiring ponderous fly-wheel of time has completed another revolution, and the allotted period has arrived, when the Louisiana State Dental Society is again brought together in annual convocation.

The cycle of another year has passed, and once more have we assembled here in this time-honored and illustrious hall of learning; and as a re-united brotherhood in solid phalanx arrayed, with heart to heart and with shoulder to shoulder, to give another push and another lift to the cause of dentistry in this our own State of Louisiana. Once more do we meet to report our achievements, and to relate our experiences in the field of dentistry for the twelve months just elapsed.

We convene again to formulate new plans, to impart information and to receive instruction for this promising Columbian year, that like a new-born flower is so beautifully budding and expanding before us.

This annual three days convention is to us a school, where we all are teachers, where we all are pupils, ever ready to impart knowledge, ever eager and willing to receive instruction, joyfully giving, gratefully receiving.

"Freely ye have received, freely give."

"Give, as the morning that flows out of heaven."

- "Give, as the waves when the channel is riven;
- "Give, as the free air and sunshine are given,
- "And get what you can, and what you get hold.
- "'Tis the Stone that will turn all your lead into gold."

It is not my intention, gentlemen, to serve you with a recital of the birth of this Society, or to inflict upon you a reiteration of its past history. You have heard all that before; it has been ably and vividly portrayed by my predecessors in office. You have heard of its trials and vicissitudes. You have been told in detail how the grand old ship had been driven and buffeted by the winds of adversity, nearly wrecked upon the rocks and reefs of professional strife; how our craft had proved seaworthy and weathered the storm, and returned into a port of safety. How she had been refurnished and equipped with a new crew, she again spread her sails, and with her white wings unfurled to the breeze she again ventured forth upon the sea of Dental Science.

This Society is your Society, it is my Society. It belongs to all of us. It is common property; no party wall divides us; we are one family, we live under one roof. Like the house that you own and call your home, every nail that you drive, every improvement that you make will redound to your benefit, will add to your comfort.

Every worthy thought, every honest exertion that you put forth in its behalf will not be in vain, but will come back to you as compound interest.

"The sun does not shine for a few trees and flowers, but for the wide world's joy." The lonely pine upon the mountain top waves its sombre boughs and cries, "Thou art my sun." And the little meadow violet lifts its cup of blue and whispers with its perfumed breath, "Thou art my sun." And the grain in a thousand fields, rustles in the wind and makes answer, "Thou art my sun." And as the grand orb of day sits effulgent in the skies, not for a favored few, but for the Universe of Life, so does this Society exist for every worthy dentist in the State of Louisiana.

Numerous and varied are the causes which militate against the profession's elevation; and among others, a want of self-respect, a lack of professional pride has accomplished more than its quota towards depreciating the status of the dental art.

"A community never esteems a dentist higher than he esteems himself." He who is wanting in self-respect cannot claim a just recognition from others. He who underrates his calling cannot hope for a proper appreciation from those whom he would serve. The dentist who values his time and counsel, and who gives value for value, is the one who is appreciated. He who works for nothing generally receives all that he deserves.

In this age of progress; in this helter-skelter, hurry-worry nineteenth century, the attainment of wealth and an inordinate lust of lucre is the shining goal. To such an extent has this spirit, this contagion invaded the dental profession as to make many, many practitioners forget that they are workers in art.

Excellence in art cannot be attained, when the only and absorbing thought is the fee that is to be obtained; or when the ruling motive is the accumulation of the dollar.

The almighty dollar is the ever present evanescent star, 'tis the morning star, 'tis the evening star, which illumines the path and guides many a practitioner in his daily dental transactions; and under its baneful influence our profession is carried further and further away from that standard, and from that position which it should rightfully occupy among the higher and nobler arts and sciences.

Our profession can never attain that degree of respectability that it so greatly desires, and that it so constantly clamors for so long as mercenary motives are the guiding reins of practice. The pleasure of the pursuit has always been its best reward; the wealth which followed but an accident.

Competition is surely the life of trade; it has become the substance and the life of the dental profession; it has become the power that is fast transforming the dental art into that of the dental trade.

It is no longer a competition for excellence; it is no longer a rivalry for superiority. It is a competition for depreciation. It is a contest in which the one who proffers his services for the least remuneration, who succeeds to the

greatest degree in belittleing himself and his work becomes the most popular and the hero of the day. Nothing is so degrading, nothing so humiliating to a liberal profession than this chaffering, this despicable bartering with a dictatorial public for terms. Modern trade principles, quick sales and small profits, and "quantity not quality," are the maxims which govern and characterize in a great measure the dental operations and transactions of to-day. Such, my friends, is the laudable ambition which inspires so many, and some would-be progressive dentists of our age. Such is the lofty elevation to which dentistry is being unceremoniously hoisted.

While some are so peculiarly wrapt up in business and in self, others are so overpowering, so complete in self-acknowledged wisdom. To either class, dental ethics, society and affiliation hath no charms.

"Far does the man all other men excel,
Who, from his wisdom, thinks in all things well;
Wisely considering to himself a friend,
All for the present best, and for the end.
Nor is the man without his share of praise,
Who well the dictates of the wise obeys;
But he that is not wise himself, nor can
Hearken to wisdom, is a useless man."

Legislation wise and effective is to be desired, and will doubtless accomplish considerable, but it will not and cannot correct and eradicate the present existing evils which mar and debase dentistry. It may prohibit incompetents at home; it may debar incompetents from abroad, but it cannot formulate a standard, nor can it regulate prices; it cannot enjoin the unscrupulous and unprincipled whose avarice leads them to disregard the edicts and teachings of their respective colleges, who ignoring all ethics enter the profession for all its monetary worth, and nothing more.

The poor, misguided incompetent is not so much to be feared or censured as those who with educational qulifications in the garb of reformers, and who like wolves under the protection of their sheep skins, can defy all law, and can establish and follow a self-wrought standard of right and wrong. As yet much fault can be found with the methods

pursued by colleges, for in spite of reforms, improvements and extended courses, much crude material is yearly turned out upon the profession and a confiding public. The inefficiency of many dental graduates is but too apparent, and such lack of preparation to practice, is but another pernicious influence towards deteriorating the character and quality of dentistry.

A recent writer says: "In certain places, there is great cause for complaint with the result of college education, and the demand is for fewer schools, more thoroughness in methods and less strife for the longest list of matriculants. Competition here shows its hand again. Quantity is the desideratum. Quality an often consideration.

The character of matriculants and graduates should be carefully considered. As a rule, the honest man will be faithful in what he does to the extent of his ability, and the inevitable result of such faithfulness will be improvement, The dishonest practitioner is an uncertain advancement. quantity whatever his attainments, and his careful operations depend upon mere whim fancy for a patient or opportunity to deceive. Unfortunately for the good dentist, a large portion of the community upon which he depends for support, consists of those who judge superficially, or are easily decived by large pretensions. The truth is that one of our serious wants as a profession is education among the people, who can demand and obtain what they need, whenever competent to judge, but will continue to be imposed upon so long as they lack knowledge of what constitutes ability and shrewdness in comprehending character. In many colleges, theoretical acquirements have the precedence, while the means for thorough practical, demonstrative instruction are inadequate and neglected, and especially is this remarkable as regards Mechanical Dentistry or Plate work. That branch of our profession has suffered and retrograded. tainly inferior to the productions of twenty-five years ago. The cause, to a great extent, is the utter aversion and distaste manifested by so many of the younger element of the profession, and even by those who have advanced in practice. It is regarded as the mire of Dental Science, through which they cannot, or are willing to evade. It is relegated to the

apprentice of a few weeks experience, or to the journeyman cook in the laboratory, who does it up brown, and serves it up quickly. Everything is good enough and all goes. The modern dental student and graduate is becoming too æsthetic. While his flights of fancy, and his lofty aspirations are in a measure pardonable, his supreme and ruling thought is of winning renown, by way of the golden bridge and the golden crown.

This recalls to our mind some high-flown remarks of a young and rather fresh dental graduate, which we overheard many months ago. He decried plate-work, shunned it, hated it, and declared he was very incompetent in that particular branch of the science, but as regards gold fillings, contour fillings and crown work he was au fait and could perform such operations that would equal those of the best and older practitioners.

Oh! "consistency, thou art a jewel." Almost in the same breath was acknowledged his mechanical inability to construct an ordinary vulcanite plate, yet he possessed manipulative and mechanical skill sufficient and of such high order, as to produce results equal to those many years his seniors in experience. Such windy vaporings serve two purposes, fortunately they serve to disparage those that give them utterance, and as fortunately they also disparage the honest and worthy achievements of better men.

To all such colicky temperaments, a few drops of peppermint, mixed with a sufficient quantity of mature advice might serve to dispel such ebullitions of superfluous wind on the stomach, and alleviate such eructations of conceit.

A dental school gentlemen, in our midst, is a crying necessity, and a want that is universally felt. The desire for such an institution is daily increasing, and frequent inquiries regarding it are being made from all parts of the South. A simon-pure Dental College, independent and unattached to to a medical department, in this metropolis of the South, with its many and special advantages, would, in time, prove a success as well as an elevating influence in our profession. Many dentists, who are now practicing indifferently throughout our State, as well as in those neighboring States, would give the New Orleans institution the preference, and young

men whose limited means, has been a stumbling-block in the way of equipping themselves for their life's work would hail such an opportunity with delight. With some enterprise and energy a small and modest beginning, concerts of action, and an abscence of all jealousies, such a college should succeed.

It is with feelings of regret, that I must announce to you, gentlemen, the abortion of the amendment to the law to regulate Dentistry in Louisiana, which was presented at the last session of the legislature. The able committee, which was appointed by my predecessor, did all in its power, and left no stone unturned in its efforts to secure its final and successful passage. The bill was first introduced as a Senate bill, through which house it passed without any difficulty. In the House of Representatives its path was not so smooth, nor was it strewn with flowers. Considerable indifference was at first shown toward the bill, although it did not at any time meet with active opposition.

Finally, after many halts and stops, and parliamentary maneuverings, it was announced as having passed the Senate and House of Representatives. All it yet needed was to pass the Governor, who for constitutional reasons withheld his summative decree of his hand and seal. Committee in turn entrusted it to others equally trustworthy. We can but deplore the lack of thorough preparation which caused its defeat. We have but to try again. I desire to return thanks to the members of the Executive Committee for their co-operation and assistance in notifying the profession throughout the State, and for their ready and prompt response to all calls made upon them in the preparation of our programme, and in the arrangements for the meeting.

In conclusion I will quote a few remarks of Dr. Magill, who said:

"While to the college has been conceded the paramount influence in dental education the educational force of association is equal to if not greater than that of the college. The direct influence of the college is limited to three years, whereas, the Association continues to shed light and influence during all the years of one's professional life. It is a

school where experience teaches, and discussion draws out truth."

If we would succeed in building up this Society, self-interest must in a measure give way to the common interest; it must be subservient to the common welfare. Each and every member should constitute himself a solicitor for its prosperity. First sympathize and co-operate with the great cause yourself, then can you enlist the sympathies of others, and so increase your membership. With an augmented crew, with new rigging, with renewed hope, we can enter the gulf-stream of advancement, where our sails will inflate with the trade winds of progress, and the pages of our logbook will be a bright and honorable manifest of our yearly voyage upon the deep sea of dental science.

EXPERIENCES IN ROOT FILLING.

BY GEO. J. FRIEDRICHS, M. D., D. D. S., NEW ORLEANS, LA.*

When approached by your worthy president on the subject of doing something for the Louisiana State Dental Association at their session, he suggested that I should give my experience and method in root filling. In fact, he finally persuaded me to believe, that it would prove both instructive and interesting to the profession. On the strength of his judgment I am now before you, hoping that he may not have been mistaken, either in the subject chosen, nor in the man that is to dilate upon it. The subject itself, rootfilling, in twelve teeth out of thirty-two, is a very simple operation. I do not think that our worthy president desired to learn my special modus operandi, as I have none, but rather wished to get at the results obtained in the experience of a forty years' practice in the performance of this operation upon the teeth.

This trite subject crops up periodically in our journals, and in our Dental Associations proves a fecund field for discussion, yet it must be confessed by all of you here assembled, that the questions, as to the best, or only method, what substance to employ to ensure absolute success, has not yet been ascertained.

^{*}Read before the Louisiana State Dental Society, February, 1893.

Gold, at first was considered the only true substance to employ for filling the root canal, whether on account of attending expense or lack of sufficiency of skill to perform this operation with gold, we know that other substances, as a rule, have been employed by the profession. The cements Oxy-chloride and Phosphate of Zinc held first honors for this purpose for many years. For unaccountable reasons they have lost standing with the profession, and in their stead, Gutta-percha, Chloro-percha, cotton saturated with carbolized cosmoline, iodoform-paste, lead, tin, wood, etc., etc., bear the honors of the day at the present moment, The wonder to me is, that after forty years' observations, experiments and trials, that there are still roots so obstinate as not to yield to the inevitable and cease developing abscesses to the annovance of the dental fraternity. Before proceeding further, I desire to state that I am not writing a scientific paper, for I am not aware that I have anything new to offer you. All that you may expect to hear will simply amount to personal observations and facts, which have come to my knowledge.

Recurring to our subject, the query is: For what object, and for what reasons, are the root canals filled? Are not the principle reasons, firstly, to prevent discoloration; secondly, to prevent inflammation of the tissues and the formation of alveolar abscess, that the consequences usually following may be avoided, such as suffering, pain and disagreeable odor, etc., etc.; thirdly, to prolong the retention of the teeth? These permises being stated, what is the prognosis? In the normal condition of the pulp, that is, where the pulp has become exposed without previous lesion Most favorable. The sooner the root canal. or irritation. under such conditions is filled, the best results will follow as a rule, the discoloration of tooth substance will be but slight, nor is it likely that pericementitis or inflammation of the surrounding tissue will ensue for years to come.

On the other hand, when the pulp has become supersensitive from irritation after exposure, no matter from what cause; or the pulp being dead and root in a septic condition, in that case, it must rest with the operator and left to his

judgment as to when the root canal is to be permanently sealed.

This knowledge cannot be gleaned from books, and can only be acquired from experience. There are not to be found two human beings who are similar in figure and constitution, neither will you find two similar cases, or conditions, where rootfilling is called for; consequently, without experience for a guide, your operation will be guess work, and some time it even proves guess work to those who have had years upon years of experience, for there are to be found persons whose systems are so constituted and so organized that a tooth deprived of its pulp is not tolerated in the maxilla. In these cases of idiosyncrasy, rootfilling is of Fortunately for us, these cases are rarely met no avail. with. Then again, you will meet with persons so constituted, who may have their mouth full of dead teeth and roots, who seem to be totally exempt from all annoyances or trouble usually attending the loss of the pulp. Where this diathesis predominates, no matter how the operation is performed, or what material is used, whether cotton saturated with a little creosote, iodoform-paste, etc., etc., favorable results generally follow.

Now, as to retention or duration. The longest case on record of which I have positive proof, lasted twenty-three years without giving any annoyance or trouble, the tooth cuspid, superior maxillary, age of patient when filled, thirteen years. Next case, hearsay, I was consulted in regard to an aching central incisor. I was informed that the tooth had been filled for eleven years and that this was the first time that it had caused any suffering; found tooth dead; root filled with oxy-chloride of zinc. Became thoroughly convinced before I succeeded in removing the filling to get an opening through apical foramen, that the operation had been well performed; finally succeeded. Relief followed, After due time this root and tooth was refilled, and it is now over three years, that it is on its good behavior. Whether the first case spoken of could have been retained under proper treatement, I am unable to say; for when the tooth first became troublesome, my patient was in Texas on business, and while there called upon some dentist for relief and

treatment. On his return, when he called, he was broken down from his trip and in very poor health, being very much discouraged as regards the results obtained in the treatment of his tooth, having suffered for months, he insisted upon having it extracted, to which I reluctantly acceded. I promised myself not to report a single case, yet I drifted into it on the question of durability. Two cases are no criterion as to results, even in my own practice, where there are at least five thousand other cases to hear from in my forty years of service.

With our present knowledge of asceptic surgery, filling the root canals of the teeth is not a question of choice, it is an absolute requisite. The pulp canal must be hermetically sealed with some non-irritant and indestructible substance to guard against future septic conditions as far as it lies within our power, if the comfort of the patient or retention of the tooth is to be taken into consideration. It is a mistake to say that all that is necessary is to hermetically close the foramen at the apex of the root. This I set down as false doctrine.

Vacuity is unknown in nature; every space is occupied, and if you do not fill up the rest of the root canal, you cannot honestly say that the case was treated aseptically, conscience would reprove you for not having done your whole duty, should inflammation and other troubles ensue, and be the sequence to such an operation. You may often have heard the statement that ninety-five per cent, of my This naturally leads us to infer that cases are successful. this is due to method and treatment. Yet, upon what is this assertion based? We have here an admission that five in every hundred cases are liable to give trouble, or prove failures. What positive evidence or proof has ever been brought forward by anyone making these assertions, that the ninety-five other cases that each and every one proved successful?

Have these operators kept a record, and if they did, could they affirm upon oath, that each and every patient for whom they had performed this operation, had returned to them for relief if suffering from subsequent affliction? Let us suppose a case: the operation is done in New Orleans,

and the patient afterwards removes to San Francisco; if this tooth should give any trouble, would the New Orleans dentist be any the wiser for it? Yet it would stand in his book of record as a case of success.

In conclusion; as we have no reliable statistics as to results in rootfilling, let us surmise; a goodly number of them I have no doubt, (if a gum boil did not previously exist) after a time developed one, some of them were permanently relieved from giving any further trouble, through the kind offices of a neighboring confrere, and the balance may have remained in a state of innocuous quietude to the credit of the operation and the operator.

ORTHODONTIA.

BY R. L. ZELENKA, D. D. S., HOUMA, LA.*

According to Harris' "Dictionary of Medicine and Dental Surgery," the term orthodontia, (dental orthopædia) derives its signification from two Greek words, straight, right and a tooth. That part of dental surgery which has for its object, the treatment of irregularity of the teeth.

To the best of our knowledge, the treatment of this affection dates over a century according to researches by Dr. Farrar Fauchard, a Frenchman, in 1746, and Bourdet, in 1757-1786, were the pioneers of orthodontia. Some years later Dr. Bonwill came out with a device differing but little from those of Fauchard and Bourdet. In 1850 Dr. Chapin A. Harris, founder of the Baltimore college, assisted in the development of this branch of dental surgery. Among those of the present day, who have given original appliances and attained much success and renown in the practice of this specialty, are: Drs. J. N. Farrar and Norman W. Kingsley, of New York City; R. B. Winder, of Baltimore City, and P. J. Freindrich, New Orleans

The sources of irregularities are divided into two general causes: hereditary and acquired—deciduous teeth remaining in the arch too long, insufficient space, and it is said that

^{*}Read before the Louisiana State Dental Society, February, 1898.

"thumb-sucking," also "mouth breathing," may cause irregularity.

The period in which this affection may be treated to best advantage, is between the fourteenth and twentieth year, constitution and physical condition is also a consideration. At this period, the bony matrix between the alveoli being soft and spongy in texture, the teeth move very readily and with the least force, however, regulation of the teeth may be attempted as late as the fiftieth year—cases in such advanced stages, will require very persistent efforts.

The bicuspids when forced from their proper positions, take an inward course, being the last of anterior teeth to erupt, the cuspids when interfered from coming out in their proper positions appear before or behind the other teeth; the incisors present somewhat of a variety of abnormality in their arrangement—appearing sometimes behind and sometimes before the arch, at times turned obliquely in their sockets; the laterals sometimes appear a quarter of an inch posterior to their proper positions and occasionally transverse the arch. In our opinion, the most difficult cases to contend with, is where an excessive development of the inferior maxilla or a deficient development of the superior occurs—the lower jaw protruding and the inferior front teeth occluding anteriorly to the superior teeth. This form of irregularity, by proper appliances, can be corrected.

Teeth in the superior jaw are more subject to irregularity than those in the inferior—it is also most common and unsightly in anterior teeth. Irregularity favors caries and in certain instances impairs speech.

In the prevention of irregularity, the files and revolving disks will serve to little or no avail; the extraction of two teeth, one on each side, is considered far better practice—there is a diversity of opinion as to which is the best tooth to extract, between the first and second bicuspid. The extraction of laterals should seldom be resorted to—it is said that the three anterior teeth, centrals, laterals and canines, are symbolic of intelligence, meekness and ferocity, respectively. Quite a difference of opinion exists concerning the extraction of the sixth year molar. It is claimed by excellent authority, that if it is extracted before the eruption of the

twelfth, this latter tooth will appear in, or nearly in, the place of the former; other very high authority claims that the sixth year molar should be preserved till the appearance of the twelfth. It has also been stated, that if our sixth year molar is removed, it is good practice to extract the remaining three.

The treatment of irregularity of the teeth, is, in the writer's humble estimation, the most scientific and artistic operation the dentist has to deal with. From our very limited experience in the treatment of this affection, we have ascertained the fact, that it is a very severe test of the patience and perseverence of both patient and dentist.

Among the secrets of art and success in the correction of irregularity are, appliances should be neat and comfortable as possible; more anchorage than is needed should be secured; facial expression is also an important factor in certain cases.

The first step in the correction of an irregularity is to secure a perfectly articulated model and then carefully study same: plans may then be laid out for the accomplishment of the deserved object.

The change of position of a tooth takes place mostly in the crown—the apex serving as a pivot. A tooth may be moved anteriorly, posteriorly, laterally, rotated and drawn partly from its socket by means of properly constructed appliances. Those of the present time are, vulcanite and metal plates with rubber attachments, jack-screws, spiral springs, steel (piano wire) springs and gold bands with screw attachments. The latter are conceded to give the best results—appliances can be made less bulky and pressure can be regulated at will. Constant pressure is required to move teeth, and after the desired result has been attained, they should be firmly held in position by bandages or appliances—occlusion will also tend to retain them in their new positions.

Teeth that are being regulated, change place by the process of absorption on one side and the ossific deposit on the other side—the latter process being very slow, it is therefore essential that teeth that have been moved should be held in position until such deposit has taken place; these retaining appliances should be worn from ten to twelve months—sometimes longer.

As it is impossible to describe a number of cases of irregularity in a paper of this character, we will give our experience with the following:

This is the case of a young man, about twenty-three years of age, of a sanguinous temperament, the color of the teeth cream-yellow, inclined to translucency, constricted at the cervix of a high degree of development and good constitution. The upper arch complete; the lower centrals and left lateral having been lost by an accident; the posterior bicuspids and six year molars (each side) also absent.

The irregularity consisted of the right upper lateral incisor being about an eighth of an inch posterior to its proper position, occluding inside of the lower cuspid and lateral and somewhat worn from mechanical abrasion—the upper right canine occupying about one-half the space belonging to the lateral and protruding somewhat anteriorly.

The first step was the taking of an impression—upper and lower and a model of articulation made and carefully studied. The arch being very full, we decided to extract the right upper second bicuspid to gain space; the corresponding tooth, (left second bicuspid) on opposite side being carious accompanied by exostosis and a troublesome abscess, this tooth was also removed. The next step was the construction of an appliance. An impression of the upper teeth was taken, a model made and an apparatus capping two teeth, (sixth and twelfth year molars, right side), vulcanized with little knobs on each side; two holes were then punched in a piece of ordinary separating rubber, about an inch long, and thus was appended to the apparatus. The appliance placed on the teeth and the band drawn over the bicuspid. When the bicuspid had been sufficiently drawn back, another similar band was placed on the apparatus and the cuspid taken in. After sufficient time had elapsed and the cuspid was moved back, and sufficient space had been gained to draw out the lateral, another apparatus was vulcanized somewhat similar to the former, with a steel-wire spring extending from the apparatus to the lateral, on the bucco-labial surface. ligated down to the lateral with silk ligatures and the lateral drawn out. A roof-plate was then put in to retain the teeth in their new positions. The operation being completed in about three months' time.

A CASE OF IRREGULARITY.

BY P. J. FRIEDRICHS, D. D. S., NEW ORLEANS.*

I regret that I cannot do more for this meeting of our Society than giving the report of an interesting case relating to the subject.

The correction of irregularities, or mal-position of teeth in the Dental arches, has received the attention of the best minds in the profession, and its difficulties, and complications have tested to the utmost, the skill and resources of the operator.

Much patience and earnest labor coupled with well directed efforts are necessary to accomplish successful results. However, there is no operation in our specialty which affords more satisfaction to both patient and operator than this one, besides it is always remunerative—clients are generally willing to pay handsomely for perfect results, and I may also add that the fee charged, whatever it may be, is well earned.

The subject of these remarks, a little girl, was 13 years of age when I saw her. The superior centrals protruded about three-eights of an inch beyond the corresponding lower teeth. The arches were somewhat contracted. The mouth on being closed did not entirely shut out from view the superior centrals, marring the pleasant expression of the face; aside from this pecularity, it was intelligent and rather prepossessing, and of course, the parents were more than anxious that this deformity should be remedied.

After I had taken impressions of the case, and studied its peculiarities, I found it absolutely necessary to remove the first Bicuspids on either side, in order to get sufficient space to reduce the arch.

It took the little patient just two weeks to make up her mind to undergo the operation of extraction.

September 14, 1891, the plate for reducing the irregularity was adjusted. It was of the ordinary pattern, made of rubber, covering the palate and extending as far back, and including the first molars. The band also of rubber, passed around the arch on labial and buccal surfaces of the teeth.

^{*}Read before the Louisiana State Dental Society, February, 1893.

The band is firmly attached and secured to the palatal portion of the plate by means of two gold bands passing between Molars and Bicuspids, besides allowing the rubber to make connections through the space made by the extraction of the Bicuspids. This regulating appliance was made to fit very tight against the six anterior teeth. After it had been worn four days it became loose and a further tightening had to be made, but as there would have been too great a strain on the Molars and Bicuspids, and one which would have probably moved them forward, I resorted to serparating rubber in order to relieve tention and get space. A piece of rubber was placed between Cuspid, Lateral and Central on either side, thus room was gained so that I could once more apply the band force for general reduction. In a few days the rubbers were removed, and the band tightened to force the Centrals back. The band was tightened by simply heating it over a spirit lamp, and with the fingers pressing it slightly inward and immediately cooling off in water. This process was continued until it became necessary to shorten the band. This was done by cutting a piece out of its center, and by heat and pressure bringing the two ends together,

In the meantime it became necessary to cut away the palatal portion of the plate immediately posterior to the receding teeth in order to relieve pressure caused by a cushioning of the soft tissues.

In the course of about two months the reduction of the irregularity was complete. The case was now ready for the retaining plate, which was made in every way similar to the one for correction, only it was less bulky in construction. This plate was worn constantly for about six months, after which time she only wore it at night. The importance of continuously wearing the retaining plate cannot be too strongly impressed upon the mind of the patient who has just undergone the pain and inconveniences attending the regulating process. It depends upon the faithful wearing of this plate if any permanent benefit and success is to be realized. The principles involved in the reduction of irregularities may be reduced to this simple statement:

1st. An appliance to meet the requirements of each individual case.

2nd. Its attachment in such a way that the necessary force can be applied to the teeth to be moved.

3d. An appliance which will keep the teeth in situ until there is no further tendency to change position.

There is one other important thing to consider, and that is the age of the patient. In my opinion, no general regulating should be undertaken, until the cuspids have made considerable progress in eruption. By this time the changes which still take place are reduced to a minimum, and can therefore interfere but little, or retard the work to be accomplished.

IGNORANCE AND NEGLECT OF PARENTS, FROM THE DENTAL STANDPOINT.*

BY C. C. DALHOMMER, D. D. S., PLAQUEMINE, LA.

To the Members of the Louisiana State Dental Association:

Gentlemen:—It is a well known fact that parents are, as a rule, entirely too ignorant of the care which the deciduous teeth of their children are entitled, and consequently great damage, and often irreparable loss of the permanent ones, are the direct consequences of this most culpable and unpardonable neglect on their part. We need not add the grave result wrought upon the nervous system of these children, which can sometimes be traced with certainty to this primary cause after the lapse of years. How to remedy this great evil will be the object of this paper.

Happy will I feel if I can only cause a ripple to be formed upon the placid waters of this intelligent and progressive assembly, which, no matter how infinitesimal, will still be strong enough to cause this idea to be taken up and discussed.

When this is done, ignorance upon the part of the mother would be culpable ignorance, and as sure as her devotion to her offspring is pure and sincere, so certain this counsel emanating from such a reliable source will be faithfully followed. The benign effects of her kind and most worthy assistance to the dentist and to the dental profession, would be ipso facto a most potent factor to help us to preserve for the

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human race the teeth which an all-wise creator has intended.

In our every day life we are taught to use all honorable and available means in order that we may accomplish our ends to the best interests of our fellow-beings. The intelligent and progressive physician will not be silent upon any topic, when, in his belief, his patients could reap some benefit by his speaking. The electrician stationed upon the summit of Mount Washington, or some other place above the clouds, advises us from what direction we must expect the next storm. The minister from his pulpit warns us of the dangers of which we are threatened, and points to us that horrid hell all ablaze! So also the dentist in his office, as well as otherwise, must advise his patients as well as the public in general, as to the methods of preserving the teeth.

As the real dentist desires above all that dentistry should dwell upon the highest floor of the great Chautauqua of American science, and as each one of us has undertaken, to benefit the human race to the full extent of his abilities, I say, let us begin our work at the cradle. In later years will not these frail and helpless little babes be the giants, the proud manhood, the sweet, refined and respected womanhood of the world, who, in their turn, will transmit to others the lessons which would be given them? Then our good work would speak for us in most eloquent language.

Looking to this end let us discuss this matter; let us see if we cannot get up a little guide which would or could be placed in the hand of every mother in the land, explaining to her when her darling baby's teeth will erupt; when each one is expected to appear; which teeth are the six year molars—these mysterious teeth which seem to be a puzzle even to M. D.'s.

I believe the six year molars are almost invariably taken to be deciduous teeth, hence the appalling number which are left to go to ruin and not alone through the ignorance of vulgar, but refined parents as well. All of us know how difficult it is often to have parents to acquiesce to this fact in having these teeth filled in time.

Not long since a lady brought me her ten-year-old son with two inferior six year molars, badly decayed, with live pulps. I was apprized by the lady that these teeth were de-

ciduous ones and that they would soon be shed and that other ones would replace them, and she asked that they be extracted. I explained to her how they might be saved, that they were permanent teeth, etc. But she wanted them out and she did not stop ntil I had extracted both. Upon leaving my office she promised to bring back this same child and show me that new teeth will have replaced those I had just extracted. I told her not to fail to do so. About two months afterwards the same lady entered with her son and proceeded as follows:

"Doctor, the two teeth you extracted some time ago for my son, you said would not be replaced?"

I said I did.

"Joseph, said she, open that mouth of yours and show to the doctor those two new teeth."

Upon examination I found that a bicuspid upon each side had erupted near the places which the six year molars had occupied, and she believed these teeth were the permanent replacers of the two extracted. Any reflections upon this case is useless, except that it exactly explains thousands of other similar ones.

It is the duty of the dental profession to devise some means of reaching and to instruct every mother concerning the scientific care required for her child's teeth. She ought to know when each one is expected to erupt, and be advised of the dangerous symptoms, and whom to call upon for relief.

I remember that father, although neither an M. D. nor a dentist, recieved a medical journal—"Journal of Health," I believe—and would, whenever he found anything suitable to children's understanding, read it aloud to us.

One article, I remember, treated of the best preventitives for a cold, and this article alone has preserved me from passing through many days and nights of suffering.

Professional ethics object rightly to our using the columns of newspapers or pamphlets or other similar advertising mediums to advertise our skill and I would not desire to be understood as endeavoring in the least to find or to form a loop hole into the sacred precincts of the profession I hold so dear, in favoring in the least anything which the Code of Dental

Ethics forbids. But in the face of needs which are crying for redress from an intelligent commonwealth, I take the liberty of submitting to this intelligent assembly of representative dentists a means which would, I believe, bestow an everlasting benefit upon mankind in furnishing the public the means to acquire the required knowledge upon such essential subjects.

My suggestion is for our State Dental Associations to contribute a handsome little circular which would contain beautiful colored illustrations of the human mouth with the deciduous and permanent teeth well delineated; explaining at what epoch of one's life each tooth is expected to erupt, and a few simple and accurate directions for guidance in the care of their teeth. This book or pamphlet would be composed of extracts from dental text books in an abridged form. Being published by the Louisiana State Dental Association as a present to the people of our state, it would not be the property of any dentist. No dentist's name (except as quoted from text books if required) would be found in its pages. No shameful and degrading advertisements, not even the name or picture of any dentist, or even the most simple dental notice would be allowed in its pages. This pamphlet or book would have one object, one special object, i. e., a guide to parents in the scientific care which their children's teeth require and which our civilization demands. be a source of valuable and always reliable information and counsel from an accredited and honorable source. would be an invaluable boon to our state, to the world, and a jewelled crown to the dental profession.

WISDOM TEETH-THEIR ILLS *

BY DR. C. C. MARTIN, NEW ORLEANS.

The name given to the third molar teeth is believed to arise from the ancient impression that these teeth erupt at maturity. My observation has led me to believe the idea is partially correct. That is, early development of the person physically, as well as mentally, is usually accompanied by early development of the dentes sapientiæ, and, on the other

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hand, late development is followed by late eruption of these teeth. I have met with exceptions to the idea: no doubt there are many. These teeth are erupted, as given by writers on the subject, from the seventeenth to the twenty-first vear-a few earlier, but not later. I met with one case, of a girl only a few months past her fifteenth year, with two well developed lower wisdom teeth. My own teeth of this class, both upper and lower, made a miserable exit from their concealment, between the age of twenty-six and twenty-nine. I met one case, of a man forty-four, a physician, who erupted these teeth only a few years before, and had suffered a great deal. The troubles in eruption are caused mostly from lack of space between second molar and the ramus of the jawbone, in the lower maxilla. For my own convenience I will divide these ills in eruption, into two classes. first class, and by far the more numerous, is attended by sore and swollen gums, frequently ulcerated sore throat, stiff hinge, inability to masticate, hysteria, etc. The writers add to these troubles, disordered vision, deafness, St. Vitus' dance and tetanus, but this applies to both my first and second class. Usually: all the treatment indicated is, relieving the pressure, if any, by the use of the lance. Removing overhanging flaps of gum is sometimes beneficial. gums with an antiphlogistic. I have used phenol sodique, and later campho phenique, with good results. The second class, though not so numerous as the first, are hard to diagnose: and a disagreeable feature I have had, is to satisfy the patient with my diagnosis, for the very sufficient reason, on their part, that relief, at once, is exceeding uncertain. give three cases of this class, as I have met them in my prac-While I have had others, these seem to be more pro-Case 1st. Mrs. K., age 22, in robust health, had toothache; as she said, violent at times, in second lower molar, left side. A close examination showed no decay. few small fillings in the two molars were in good condition. There was no soreness or swelling over the unerupted wisdom tooth, only the slightest tenderness in second molar. exhausted my material medica, with but little relief. Several weeks later I extracted the second molar, and relief was given at once. Some months later, a wisdom tooth appeared, exactly in the place of the extracted molar, only showing a slight tilting forward. Some months later still, the lady had the same troublesome experience, on the opposite side of her mouth. Case 2d. A maiden lady, age about same as first case. She was afflicted with rheumatism, and had been for some years. She complained of almost continual neuralgia on left side of her face. As in first case, I could find no decay, neither swelling or soreness in the gums, over the unerupted wisdom tooth; neither the slightest tenderness was found in any of the teeth. Also, as in first case, gave very slight relief. She consulted her physician, with no relief. Her ills continued for months, and only ceased a short while before the eruption of a wisdom tooth in lower maxilla, on same side as the trouble.

Case 3d was a young lady just past her sixteeth birthday. Her teeth had lately been put in good condition. She suffered no pain. But her face was badly drawn to the right side, as well as her mouth. She had quite a pitiable appearance, and the distortion was increased many fold when she attempted to laugh. She was in great distress, being of a lively disposition. She had a newly erupted wisdom tooth on the right side in lower jaw, but none on left side. I could find no soreness or tenderness of gums or teeth, nor decay, likely to cause any trouble. I told her the unerupted wisdom was the cause of her trouble. Her physician said he expected I was correct, but had not thought of that as a cause of the trouble himself. He had been treating her for the paralysis, and continued, but very slight, if any relief, was given. Her trouble continued, very bad at times, then very slight, for six or eight months. A short while after her trouble passed away, a wisdom tooth came in its proper place. Some members of the Society will remember I reported the last case at the last meeting of the Society. The favorable termination having taken place since that time. The last case differs from the first two in age, being six or seven years younger. Her teeth was of very poor structure, while theirs were of very good structure. The arch was full in the first two cases; want of room seemed to be the cause of the ills, while the last case seemed to have room enough, as the first molar, on each side, had been lost,

The ills of these teeth are by no means at an end when eruption has taken place. They are as subject to decay as other teeth. In fact the popular idea is that they will soon be lost from decay, and are not worth filling at all. idea is wrong, in part, at least. I usually fill them when decay appears, and preserve them as long as it can be done with a living pulp, but when pulpitis set in, if the patient has a first and second molar in fair condition, I advise extraction, as the best service to my patient. My reasons are these: The wisdom teeth are of no service in mastication when the arch is full in front, but if the first or second molars are lost, these teeth are brought into service. I have in my own mouth two lower wisdom teeth doing good service, having lost my first molars before the the eruption of these It has also been my practice when a patient has first and second molars erupted and either of them has an aching, exposed or dead pulp and tooth, much weakened from decay to My observation has led me to believe that longer and better service may be expected from a wisdom tooth with the space gained by the natural tendency to move to the median line, as well as with its living pulp, than in the class of molars referred to above, as all dentists know such teeth are subject to abscess or troubles in that direction.

I am well aware that some dentists say the articulation is ruined by this tilting forward of the teeth caused from the extraction of the first or second molar. Permit me to say I have heard of much worse troubles in that line than I have seen—I take, as I think, the less of two evils,

I shall now give two cases of serious ills caused from decayed wisdom teeth with dead pulps. Case 1st. A married woman, age about thirty, pregnant, five or six months advanced. Physicians had treated her for several weeks for toothache, swollen and stiff jaw. She had grown worse all the time. Her cheek had been punctured to the bone without finding any pus or giving any relief. Her jaw was so stiff extraction was impossible at the time. After some applications to her jaw I was able to extract the lower wisdom. It was burrowing in a mass of pus—I found a fistulous sack at the alveolus, distal portion, extending in the direction of the angle of the bone. The other teeth were free from decay

in front of this tooth, but there seemed to be pus sacks forming around the necks of the four teeth forward. I washed out all the sacks first with warm water used with a syringe, then following with a disinfectant. I ordered the same thing to be repeated twice a day by the patient. I saw her some days later with a physician. There had been no improvement. The sacks were larger and the pus formation greater than when I first saw her. I extracted the four teeth forward with the consent of the physician. I washed the sockets of all the extracted teeth and directions given to continue the use of the syringe twice a day. She was relieved greatly, but not cured, some swelling was yet present a month later. I then lost sight of her for several months when she again appeared with a worse swolen face than at any previous time, with an angry point, below the maxilla, in the muscles of the neck. With the previous physician's help, applications were made and the pus was let out. It was in large quantities, and very She was to return later and report, but as she had mooved some distance away and was poor, she likely was unable to bear the expense of the trip, and we saw her no more.

Case No. 2. A man, age fifty-five. He was first attacked with toothache on right side of his mouth, lower jaw. the course of a few days swelling came and the pain increased. A little later, by the advice of a physician, he used poultices, and the ninth or tenth day it burst and discharged freely, both on the jaw and inside of gum. expected to get well in a short time, but not so-he was relieved of pain mostly, but the discharge continued with only a slight lessening of the swelling-while the stiff jaw was relieved very little, he continued unable to take any solid food. I first saw him near a month from the time his trouble began. He had been using peroxide of hydrogen for two days by the advice of a physician. I found one opening at the inner wall of the alveolus of the third molar, and five on the jaw below the bone, from angle to mental foramen. Peroxide inserted in one of these outer openings bubbled through the other openings. I found the wisdom only decayed and extracted it with an elevator. He continued to use peroxide for several days, but did not find the relief his physician and

I expected, so I advised the extraction of more teeth, though they were not decayed, and but little sign of pus sacks as in the first case. The patient was willing to submit to any operation, as he said "he had given up to die, but would rather live if there was a chance." With his physicians consent, I extracted the four teeth in front of wisdom socket. His ills continued for some time in the same way—the peroxide being used all the time, except once a week, alternating for a carbolized wash. Near two months from the time of the extraction there was a noted change for the better, and by the end of the third month all was well, the openings healed and he was a happy man. I saw him a little later and his mouth was all right except the loss of his masticators.

Some may think it was not good practice to extract these four teeth—I only did it as a precautionary measure, feeling he could take no risks in his condition. I prefer to use Physick's forceps as a rule in extracting these teeth, especially when they are badly decayed or broken down. They frequently have a hook at the apex leading into the ramus in lower jaw, and a similar hook in palatal root in upper maxilla. An elevating forcep relieves that hook by turning the tooth back. With any other forcep in my hands this part is broken and remains in the bone.

HOMOEOPATHY IN DENTAL PRACTICE.*

JULES J. SARRAZIN, D. D. S.

Five years ago I was first invited to experiment the effects of homoeopathic treatment by a medical gentleman whose office was then across the street from mine. I was then a very strong disbeliever in the system, and carried my antagonism so far that whenever an opportunity presented itself, not only would I ridicule the treatment, but even did not spare the adept of it who chanced to have entered into a discussion with me on the subject. I had taken the trouble to figure out the fraction of a drop of tincture that entered into a 3 of a third dilution, and the calculation had quite convinced me—thanks to my previous education in materia medica and therapeutics—that such infinitesimal quantities were

^{*}Read before the Louisiana State Dental Society, February, 1893.

absoluthly incapable of producing any effect whatever on a This said for a third dilution, a low one, living organism. what then about a 12th, a 30th, a 200th, a 1000th, or higher still? The thing appeared irrational, foolish, stupid. Preconceived ideas are dangerous friends. I had been taught that drugs acted on our system by absorption into circulation, and that, in all instances, it required a certain quantity of them to produce an effect. Drug action had been studied, but nervous reaction against it, I was quite ignorant of, and even when compounded with the facts, long afterwards did my reason rebel against a therapeutical modus operandi. which it did not then comprehend, for lack of education in that direction, but which is, however, very simple. We are well aware that cathartics, for instance, will, as an after effect, that is after the action of the drug absorbed has thoroughly exhausted itself, produce constipation, and that the more frequently they are resorted to, and the more tenacious will constipation become when all treatment of this kind has been continued for enough time, so much so that people who accustom their digestive apparatus to regulating pills, laxatives and the like, become, in time, slaves to them, until they cannot live comfortably without them. sons who contract the habit of using morphine to induce sleep. will, after a time, become victims to the habit, because natural sleep will fail them, and rest must be procured by drug effect. Again, the tobacco, coffee or alcohol consumer feels his system so depressed at every attempt to discontinue these several stimulants, that he resorts to habitual and constant indulgence to obtain the required drug effect to prevent the nervous reaction which must set in when the stimulant is no longer indulged in. It is upon these facts that homœopathic treatment rests; on the nervous reaction brought about by the administration of curative agents, in the aid thus offered our vital force to react against disease and conquer it. We all know that vital force alone is the power which restores health: a stimulant to it, a push. I may say, to cause nervous reaction in the proper direction, is the result aimed at: the why and wherefore of the formula: "Similia Simibus." If we administer a medicine, the drug effects of which would produce symptoms similar to those of the patient, frequently

repeated in such infinitesimal doses as cannot possiby produce an aggravation of the ailments we are fighting, we must necessarily awaken the dormant vital force to react against the symptomatology of the curative agent and the disease at the same time, and the battle is won, provided sufficient oil remains in the lamp and the proper agent has been selected to cover the symptoms of the individual case and all the peculiarities of each particular patient. this selection that comes the great difficulty; it is here that errors cause failures, particularly so when it is almost impossible to obtain, as specialists like we, all the information possible regarding the general health of the patient, and are compelled to prescribe for conditions which we see, when affinity elsewhere in the organism may be greater for the remedy we select than even that acute condition which we are called upon to alleviate, and even then I do claim better surer and more lasting results can be obtained by this means than by any other. For instance, I will say that I have not vet observed alveolar abscess to recur where I had treated it homœopathically; that the per centage of failure in acute or chronic cases is so small, that, considering in the first place the difficulties before mentioned, under which a dental practitioner must prescribe, and secondly, the possibility of error in the selection of the desired curative agent, that I do not hesitate to ascribe those two causes the rare failure themselves, since the lack of reactive vital energy is hardly ever found in such cases, our patients not ordinarily being debilitated invalids. Of course, some few, very few indeed, acute cases resist treatment, and to give relief we must take refuge in the old time method of extraction, but where such is the case, we can safely assert that some local mechanical cause, such as the formation of gases in curved, inaccessible root, or still yet some other cause of irritation is at work against us. This much said about acute cases, still better and more surprising results can be obtained in old chronic ones, where all previous efforts have entirely failed. tunately, gentlemen, the selection of the remedy best indicated from individual case is often no easy matter, and although I will soon depict a few pathological conditions, and indicate their treatment, this may vary somewhat, according to circumstances.

In order not to confuse my subject I will consider only one condition of the organs we are accustomed to deal with. periostitis and alveolar abcess acute and chronic, leaving entirely aside all other diseases of the oral cavity, and even here some little study is necessary before any amount of accuracy in prescribing can be obtained. Right here already a little list of remedies suggest themselves, ready to puzzle the beginner, and from which we must select with great care and precision considering at times even the cause of the trouble if ascertainable and the constitution and disposition of the patient. Aconitum, mercurius dulcamara, belladonna, arnica, chammomilla, calcarea carbonica fluorica or phosphorica, acidum fluoricum, sulphur, hepar sulphur and silicea would be a few of those most likely to be called into active service in fighting different forms of alveolar abscess and its after results when the patient has not been seen in time. Taking periostitis as a starting point a few of the above may be selected from. Mercurius, if soreness upon pressure with or without spongy inflammation of the gums, is manifested, particularly if symptoms of cold in the head and in the throat concur, and we ascertain that the patient has taken cold. This, provided however, that the patient is not suffering from the drug effects of mercurial preparations, in which case hepar sulphur being the antidote of mercurius, should be given. Aconitum may be used with advantage in periostitis if there is much inflammation, some fever, cold has been taken, and relief is procured by cold applications. If the trouble can be ascribed to the effects of having been wet. and there is at the same time some pulpitis, dulcamara will be found valuable. Belladonna will apply in periostitis where inflammation is marked, and headache in the front portion of the cranium is manifested. Arnica is clearly indicated if the cause of the trouble is previous concussion or mechanical pressure in any manner chammomilla, with soreness and pulsating pain, has the sensatory symptom of elongation of the tooth very marked; warm applications relieve. any two of the above mentioned remedies may be alternated if so indicated. In this incipient form of periostitis a medium dilution, say the 30th, is preferable, particularly if the patient uses neither coffee nor tobacco in any quantity, and if total

abstention from these nervous stimulants can be insured, so much the better, otherwise, lower dilutions, the 6th, for instance, can be displayed. This much said about incipiency. let us now pass to a better defined stage. We have considered periostitis singly, whether due to mechanical irritation, cold or incipient abscess. In the latter case, we may, instead of resolution, have a tendency towards pus formation. characterized by the symptoms of heat, painful pulsation, swelling, redness, soreness and elongation still better marked than in the conditions above described. The remedy is now hepar sulphur, unless the patient is syphilitic or shows syphilitic heredity, in which case mercurius virus should be given the preference, except in case the system is already saturated with mercury. Mercurius if chosen for the reasons above stated will usually lend towards resolution. Hepar sulphur may do likewise, or may hasten supuration in a surprising degree. In neither case will there be much suffering. curius and hepar sulphur being antidotes should not be alternated, of course. Low dilutions of hepar sulph, the 6th for instance, will tend toward supuration; medium, like the 30th. will on the other hand tend toward resolution. In making choice of the dilution, should be well observed, as previously stated, the patients mode of life and habits. The next stage of alveolar abscess is that in which the formation of pus however slight has already started in. This is characterized by the peculiar feeling of the parts well-known to all dental practitioners, less pulsation, swelling, tenderness, bloated appearance. Silicea should be exhibited and prescribed at a high potency in preference if the habits of the patient allow This concludes the treatment of acute conditions, taken at any stage of the trouble, and brought to its termination, and I would here state that cases so treated will not need to be followed farther into those chronic phases which will now be considered. Of course, mechanical means, such as affording free exit to the gases of decomposed pulp matter, and washing root canals with injections of hydrogen peroxide, should be at all times resorted to. I always prefer hydrogen peroxide to other disinfectants, because of its detergent qualities combined with medicinal inertness which does not imperil the action of the remedies employed. For the sake of clearness I will now describe some of the chronic conditions which may result from alveolar abscess, under the headings of those remedies which may there apply:

Calcarea, Carbonica or Phosphorica. — Looseness of the tooth caused by absorption of the alveolus.

Calcarea Fluorica.—The same conditions as above; the root being somewhat of a foreign substance, owing either to lack of vitality of its pericementum or to exposure by absorption at its apex of some of the enclosed filling material.

Acidum Fluoricum. — Lack of life and adhesion of the roots caused by the presence of foreign matter at the apex or partial death of the lining membrane; fistula, discharge of pus therefrom and necrosis.

Silicea.—Looseness of the tooth, fistula, discharge of pus. Sulphur.—Well adapted to most cases in the beginning of treatment in chronic cases to put the system in a better condition to react. For this purpose, should be prescribed at a high potency in preference, about the 200th.

This, gentlemen, is the homoepathic treatment which will usually apply to ordinary cases of alveolar abscess in its different stages. In order not to make this article too long and complicated, I have purposely avoided any allusion to other diseases of the oral cavity and adjoining parts; pulpitis, gingivitis, recession, resorption, porrhoea, facial neuralgia and the like. For all such cases, as well as for those pathological conditions here depicted, I will at any time be happy to give suggestions and information in regard to the remedy best adapted, and thereby facilitate the trial of a system of treatment, which I am convinced, would if more extensively used prove a boon both to ourselves and patients.

"ADVICE." *

BY A. J. BERCIER, D. D. S., OPELOUSAS, LA.

I will only detain you for a few minutes with a few brief, practical sentences, so lend me your attention, and if I go wrong or advise anything you can improve upon, make yourselves heard when I conclude. Remember that we are not all perfect, in fact none of us. We are nourished upon the

^{*}Read before the Louisiana State Dental Society, February, 1893.

advices and opinions of others, and keep constantly hammering thereon, in search of absolute knowledge of things. associations were organized for the purpose of exchanging ideas and opinions, the receiving and giving of advice, the weighing and revising of same, and the sifting therefrom of valuable and practical ideas. Advice, whether well or illfounded, is the governing principles of human affairs, and we should all give it our careful consideration no matter from what source it comes there may be couched therein a point worthy to be followed, and probably serve to extricate us from some very disagreeable entaglement while least ex-To the inconsiderate man experience is the only I remember when I was a student at the old Baltiteacher. more College of Dental Surgery eleven years ago, one of the students, a big fat feilow, had a pivot tooth to insert for a lady, and this after having attended several clinics on this work, after he had prepared the root and crown, he called upon the demonstrator for further knowledge and assistance. the demonstrator seeing that everything so far was all right. requested him to rag the edges of the pivot and have it ready while he inserted into the root a quick-setting cement; this having been done, the tooth was called for, when the student presented it with a cotton rag wrapped around it. You can imagine the dilema. And thus we go, one by one, falling into the false clutches from the want of thought and study, bringing feelings of discontent humiliating to both dentist and patient, loss of time and loss of reputation which costs thousands of dollars and which could be saved by a little caution. We do not think enough, is the great trouble; we are now in the iron age when a man must be up and doing: we should keep our eyes and minds on all work we do and see done, and impress upon the mind every detail; thus, when we witness a clinic, never leave the operator until we have absorbed the very essence of his advice, and we will be rewarded with happiness to see what amount of knowledge it will add to what we already have stored away. How many kept eyes and mind on the clinic of my old friend and college chum, Dr. C. L. Alexander, at our last meeting? There were. I think, appropriated from our treasury sixty five dollars to import him here from North Carolina, to advise us of

his new process of doing bridge work, a novel process and a grand scheme that will add a boon to our progressive little profession; this was a scheme prearranged by our then wide awake and worthy President, Dr. A. G. Frederichs, who is ever ready to exert his power and influence to promote the welfare of this association. Would that we all possessed the same energetic and magnetic power and follow some of the advice he has set before us, and the day would not be far distant when our State Society would stand peer to any in the United States.

Retreating to our theme, allow me to repeat the question. how many of you reaped your pro rata share of the sixtyfive dollars spent for this good purpose? How many of you paid strict attention to this new work in all its details, so as to be able to duplicate what you saw that day? Permit me to say to you all, and with heartfelt thanks to the officers and my little friend, Alexander, that I for one have been so benefitted that I have so far perfected several pieces of this work. which proved very remunerative, and all learned at that one clinic, having never done or seen any of the work previously. Let us impress upon our minds to ever be ready to learn from others and to impart what knowledge we can at our association, but never to dentists who do not attend. Give everything in detail that we do or see pertaining to our calling our careful consideration: never flatter ourselves with the belief that we know enough: "self-love is a mote in every man's eve." If we love ourselves every so much nobody else will love us at all. Too much pomposity and style, highstandingcollars, beaver-hats, and patent-leather toothpicks, are frequently considered by many as loop-holes, covers and reflectors of ignorance. Let us be neat but not gaudy, spruce but not spangle, but æsthetic. Never falter, but struggle hard with our co-laborers to reach the goal of our chosen profession; she is young and needs our minds, thoughts, as well as our skillful hand, to usher her onward to her bright destination, where she will stand among her peers; a silvery cloud overhangs her, a bright future is in store for her, she is no longer a babe, we have her full grown and in the iron age, where men must keep on their thinking-caps to navigate.

We have the advantages of modern improvements, and the advantage of but few on the top rounds of the ladder beating the untrodden paths and calling on us for assistance. Let us not follow too far behind, but push up to the front, and honor our title, and when we reach that destination, we will find our efforts crowned with a bountiful harvest of goldencollars and honors thrown in. Let us not smuggle our failures and bury them into oblivion, but let us honor them by bringing them up before our co-laborers at the Dental Association, and receive advice thereon. Think more, be cautious and considerate, and all will be well.

COLUMBIAN LETTERS.

FROM C. O. LUMBUS.

Editor Southern Dental Journal:

Your letter asking me to write something for the Journal to hand, I have always believed that it is the duty of every one of us to do all in our power to elevate and maintain our calling to the best of our ability, but feeling my utter inability to write for information or criticism, I have done very little in this line, I have at least escaped criticism. Judging from my own experince of over twenty-five years in the practice of Dentistry, and being a constant reader all my life of a number of our best journals, have often found that in letters from some so-called "Old Fogy" or Dentist from the rural districts, who would write about "Dental Things" or personal experience, telling us about old methods, and their ways of accomplishing them, before the days of modern improvements or the advantages that the young men of to-day, coming in to the profession have, would interest me very much indeed, and I would wish to see something more from There are many things that one could write about under these conditions, and if the letters are acceptable, "you may print them." For instance, we could often tell of amusing incidents that have happened in our individual lives that perhaps would interest the younger men, and I know bring smiles to some of the older ones, who would see reflections of their own experiences. Could not Jno. H. Coyle, write

an interesting letter, in regard to his early experience, traveling through lower Georgia and Florida, over twenty-five years ago, "learning dentistry" from his old preceptor, who heated vulcanizers by lightwood knot fires and vulcanized plates in wash pots, and finishing them up on common hand grind stones, afterwards graduating with honors at Baltimore College, and becoming one of the Faculty of his alma mata? Try him, Mr. Editor, and let us at least amuse some of the older boys by relating our own experiences.

I remember very well how I was taken down a few days after I opened "my office" in the little town where I commenced practice, I was sitting Micawber-like before a cosy fire wishing some ono would come along, when an old colored man, who was doing some work in the building, looked in at the open door—I immediately put on my professional air and asked. "Uncle what can I do for you?" he in a very indifferent manner, not noticing my question, remarked in scarcely an audible tone. "First time dat I knowned dar was a Barber Shop up in dis building," and passed on not paying any farther attention to me, he had seen my chair and taken my office for a Barbers Shop.

This is Columbian year, a year of great expectations, and I trust a year of many advantages to our profession. year we are all looking forward to. We have the Columbian Exposition and the Columbian World's Dental Congress, and even now we have the Columbian postage stamps that are of a very large size. A year that we look for progress in many things, then do not let us lag behind in "those things that do concern us," it behooves us as a profession to begin now to get in the "procession," in our State organizations. should fall in, form lines and get under the broad Columbian banner of Dentistry, which is being unfurled to the breeze. and march to the tune of Progress and Uuniversal Brotherhood, and meet our allied forces at Chicago August the 14th, 1893. In every issue of your journal, from now until then, you should tell us of the great meeting, urge our State committees to do their part that they have been called upon to do by the General Executive Committee. See that the information asked for is forwarded to their respective committees, so that when we meet as a great National body we may all feel that it is "good to be here," and show to the world that we are proud to be called "An American Dentist." The Southern Dentist have been kindly treated as to the honors in the coming Congress, and Georgia has not suffered in its distribution, having two places on the "General Exetive Committee," as well as places in many of the committees in the organization as a whole. We hope by the time that our State Society meets, we will be in perfect tune, and ready to receive our marching orders, so as to be at the head of the column when it reaches Chicago at the opening of the Congress. Georgia is expected to do her duty. * *

Columbus, Ga., March, 1893.

THE CODE OF ETHICS.—"Doctor," said the solicitor, "I wish you would do some advertising with our paper," "Couldn't think of it, sir. The idea is preposterous. It's against the ethics of our profession. By the way, here's an item about a man I attended this morning. Take it down to the office, will you? And be sure to see that my name is mentioned.—Buffalo Express.

HIS FIELD.—"Yes, father," he said to old Mr. Hayseed, "I've graduated, and my education is complete. I s'pose I know about everything. Now I must choose a field where my abilities can be used to the best advantage. I want a large field, where I will have plenty of room." "Son," replied the old man, "there is the ten-acre corn field, and you kin have it all to yourself.—Harper's Bazar.

A dentist of Athens, Ga., has at his office a curiosity in the way of oysters and artificial teeth. The teeth had evidently been lost by some one on board a ship, or some one who had been drowned. The oysters had formed around the teeth, and the formation is perfect. A dredging boat near Morehead City found the shell with the teeth attached, and the man who found them sold them for \$20. The Smithsonian Institute is now seeking to purchase them and offers a good price.—Dental Luminory.

Ripans Tabules banish pain.

Southern Dental Journal

A MONTHLY PUBLICATION

DEVOTED TO THE INTEREST OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. Johnson, 806 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to BOUTHERN DENTAL JOURNAL., 27 E. Hunter St., Atlanta, Ga.

Editorial.

ORIGINAL THOUGHT.

Upon reflection, after a little observation, the conclusion must necessarily be determined that purely original thoughts and ideas are becoming scarce indeed. In fact, it is now almost an impossibility for any one to justly claim originality for any idea advanced theoretically or mechanically. The greatest and most important part of our knowledge has been handed down, communicated and absorbed from others, and while we often obtain superior results by a different arrangement or grouping of ideas not our own, we have no claim to their originality. While this may be an admitted fact, it should not prevent a continued and unabated effort in research and investigation.

If nothing more be gained than these efforts it will help to keep fresh in the memory the discoveries and improvements that have already been given to the world. There is no stand-still. We either improve or retrograde, and he who has forgotten nothing, but steadily gone forward by taking advantage of the discoveries of others, has done well, even though he has not made a monument to his name in the shape of some great discovery. It was not intended, evidently, that all should be inventors or discoverors, but let us not be slow to observe and appropriate every new idea advanced by others that is worthy of adoption.

The spring meetings of our State Societies are coming on and we naturally look forward to this period for all the new in-

ventions, thoughts and ideas that have forced themselves into the busy brains of the investigative practitioner, to be given publicity. Those who have nothing new to suggest need not lag behind and feel that there is nothing they can do to promote the interest of conventions. There are many things that have been abandoned in our rush to adopt the latest, that are good and useful—things that are so old, when revived, sound new. At least, it revives in the mind theories and methods once in vogue, and causes us to make comparisons that often results in the blending of the two into a practically new and superior method to either of the former. He who can cause such a result has practically discovered a new idea, though he cannot perhaps lay claim to original thought. The benefit to your fellow-workers is, however, just as great, and the reward comes in the satisfaction of knowing that you have, at least, given something for all the vast lore that has been given you by other investigators.

SOCIETIES.

The Georgia, the Florida, the North and South Carolina State Dental Societies all meet in May. The Alabama and Mississippi each meet in April. What an opportunity to rub up and get ready, loaded for the great Columbian Dental Congress at Chicago. Besides, you will also aid these meetings by your presence and contributions, and the benefit to yourself will be incalculable.

I often wonder how it is that so few men in a state belong to or attend state meetings. Why, the social feature alone is worth many times the small expense or the little time lost, to say nothing of the actual benefits derived. Then it is due to the public and one's patients that he be informed of all the latest methods of practice. You old fogy, and there are young ones, too, who have been staying at home, wrapt up in your own conceit from year to year, leaving others to bear the burden of holding the profession together and establishing its claims to respectability, by increasing its lore of scientific attainments, just come out once and find out how little you know, how much you have forgotten, and how much you have wronged your trusting friends by not knowing what you could have learned. You don't know it all. The weakest member in these societies

can tell you something that will be worth your visit. Besides, you will see enough in the S. S. White Co.'s exhibit alone to be worth your time and expenses. Come out and lay aside your mantle of selfishness. Come out, you will be welcomed, and I know you will never regret coming and will go again.

SPECIAL OFFER.

We will send The Southern Dental Journal the remainder of the year for only \$1.00, and present each cash subscriber with 25 choice books by well known authors.

Dr. Geo. Watt, of Xenia, Ohio, so long editor of the *Ohio Dental Journal*, died February 16th, of locomotor ataxia. He was seventy-three years of age. His labors will live an everlasting monument to his memory. The Ohio *Journal* will be continued with Dr. L. P. Bethel as its sole editor.

The Dental Tribune, of Chicago, will be issued daily during the Dental Congress.

It is with sincere regret we learn of the accident in which Dr. Jmo. H. Coyle had his hand so fearfully lacerated. We cannot give particulars but learn it was from the accidental discharge of a gun while being cleaned.

Dr. W. C. Wardlaw's many friends will be pleased to hear of his speedy recovery from a recent dangerous and severe spell of sickness.

Miss A. Irene Yokum, of Savannah, is a recent graduate in dentistry, and has the honor and distinction, I think, of being the first lady graduate from this State.

THE SOUTHERN DENTAL JOURNAL one year and fifty choice books by prominent authors postage paid for only \$2.00.

The Alabama State Dental Society meets at Birmingham April 11th. Secretary Foster writes that great preparations are being made for a successful meeting. There will be splendid exhibits of dental goods and other attractions to make a suc-

cessful meeting. We hereby acknowledge a very pressing invitation. See programme elsewhere.

We call attention to a letter of warning from Dr. S. B. Barfield in this issue. He has been imposed upon by a traveling bur sharpener and does not wish for others to suffer likewise.

Before we go to press again the Mississippi State Dental Society will have had its annual meeting, which takes place this year at Jackson, commencing April 4th. These meetings are always pleasant. I speak from experience. Mississippi has some working members and if you are so situated it will pay you well to meet with them.

We understand that a fine display of dental supplies and recent additions and inventions, will be on exhibition. The S. S. White Co., will be represented from their wide-awake Atlanta branch, and there will doubtless be other exhibits. The Southern Dental Journal will also have a representative Go, the exhibits alone will be worth going to see.

WANTED MORE AIR.

Not long ago I was asked by a lady to examine her sons teeth and inform her what they needed. I found some filled with gold and several with the fillings broken down and out. One upper central and lateral were devitallized and had been drilled into from the palatine surfaces to gain access to the canals. These seemed to have been standing in this condition quite awhile as considerable decay had taken place from the interior of the pulp chamber and the canals were in a fearfully septic state.

I reported what I had found and took the liberty to inform her that if these cavities were not filled he would soon have no teeth.

examination that they had not aired enough and would advise him to wait awhile longer.

This was one reason she desired the examination made, she wanted to know about how long a tooth ought to air before it was ready to be filled. I could not make a ready response to this but after catching my breath, I informed her that there were some cases which from a peculiar idiosyncracy of the patient might complicate matters even more by airing too much and I should advise their being filled at once. And this Doctor is a graduate of a dental college, practices his profession in a city, and probably holds a state license.

Correspondence.

A WARNING.

MACON, GA., March 4, 1893.

Dear Dr. Johnson:

Through your valuable journal, I wish to warn my brother practitioners of one Mr. J. L. Leyman.

On the 15th of last November, one of my best friends in the dental profession came into my office and introduced to me one Mr. Jessie L. Leyman, saying that he was an expert Bur sharpener. Mr. Leyman being a mute, I, partly through sympathy, gave him six dozen Burs to sharpen. returned them next day, and after examining them with my magnifying glass I was so well pleased that I gave him three dozen fine cut and stoned Burs, telling him to do his best on them, as I appreciated them highly. He remarked that he would take them to his shop in Atlanta and do the work more perfectly than he could here, adding that he would send them to me in two or three days. I consented for him to do so, and asked him what his charges would be. paid him for all he had done and for the three dozen he was to return me from Atlanta, as it was more convenient than to forward the money by express. I waited for three weeks. for my Burs to come, then began to think that Mr. Leyman was sick, and probably unable to repair the Burs. fore, I wrote him to please send me the Burs at once, as I needed them every day.

Days passed into weeks and I heard nothing from him or

my Burs. I wrote again with the same result, and indeed I have never heard one word from him.

It is now more than three months since he left here with my Burs. I truly hope this letter may be a warning to some of the profession.

Very truly and fraternally yours,

S. B. BARFIELD.

Oxford, N. C., Feb. 9, 1893.

Dr. H. H. Johnson, Editor Southern Dental Journal. 306
Second street, Macon, Ga.:

MY DEAR DOCTOR—Please insert for us in the March number of the JOURNAL, that the nineteenth annual meeting of the North Carolina State Dental Society will hold its meeting in the city of Raleigh, N. C., commencing at 10 o'clock on Tuesday, May 23d, 1893, and continue four days.

A very full programme has been arranged, and it is hoped that this will be the best meeting of the Society ever held. A cordial invitation is extended to members of other Dental Societies to meet with us. One whole day will be devoted to clinics.

We adopted THE SOUTHERN DENTAL JOURNAL as our official organ last year, at Winston, and hope to have full account of our meeting this year for you to publish for us. We have a fuller programme made out than we ever had, and hope to have a better meeting. We would be very glad to have you with us at our next meeting.

Yours very sincerely,

J. E. WYCHE, Sec. N. C. S. D. S.

P. S—The North Carolina State Board of Dental Examiners will also meet at the same time and place, and all those who wish to practice Dentistry in this State must obtain license, and be on hand Tuesday, May 23, 10 A. M.

By order of Board.

J. E. W.,

Sec. N. C. S. D. S.

Societies.

NORTH CAROLINA STATE DENTAL SOCIETY.

OFFICERS—F. S. Harris, President, Henderson; H. V. Horton, 1st 'Vice-Prest, Winston; J. F. Ramsey, 2d Vice-Prest, Asheville; J. E. Wyche, Sec., Oxford; J. W. Hunter, Treasurer, Salem.

EXECUTIVE COMMITTEE.—V. E. Turner, Chairman, Raleigh; A. M. Baldwin, Wilmington; J. N. Hester, Reidsville.

Henderson, N. C., Feb. 8th, 1893.

Members of the North Carolina Dental Society:

Your Executive Committee met in Raleigh at the call of the Chairman, and made out the following schedule, which, we believe, will be an effective one, and we heartily trust there will be an earnest co-operation of the members to make this the best meeting in the history of the Society. We have given the matter of the make-up of the committees much thought, and we want each section to vie with every other in presenting a full and interesting report. The regular Annual Announcement, containing other matter of interest to the Society, will be sent out later. The chairman of each committee will see that his section has a written report, and the interest will be greatly enhanced by arranging with his associates to take different branches of the topic assigned

The Executive Committee finds that the date of meeting will have to be changed to the fourth Tuesday (23d) in May, that we may not conflict with the Georgia Association, which meets second Tuesday.

STANDING COMMITTEES.

Dental Education.—J. E. Freeland, Statesville, Chairman; J. H. White, Elizabeth City. W. P. Moore, Jackson; A. O'Daniel, Goldsboro; W. W. Rowe, Greensboro; C. S. Boyette, Mount Olive.

Dental Chemistry and Metallurgy.—I. N. Carr, Tarboro, Chairman; E. J. Tucker, Roxboro; R. W. Reece, Elkin; P. E. Hines, Marion; A. J. Pringle, Elko; C. W. Banner, Mount Airy.

Dental Pathology.—J. H. Durham, Wilmington, Chairman; A. C. Liverman, Scotland Neck; L. B. Henderson, Durham; D. L. James, Greenville; F. C. Frazier, Trinity College; R. P. Anderson, Calahala.

Dental Therapeutics.—S. P. Hilliard, Rocky Mount, Chairman; H. Snell, Washington; H. V. Horton, Winston; J. M. Ayer, Raleigh; V. J. Burgin, Marion; J. A. Blum, Salem.

Operative Dentistry.—J. E. Mathews, Wilmington, Chairman; J. E. Wyche, Oxford; J. M. Riley, Lexington; E. K. Wright, Wilson; G. W. Whitsett, Greensboro.

Under this section the following special topics will be presented:

- 1. Should immediate root-filling be practiced while purulent conditions exist at the apex? Dr. Matthews.
- 2. What are the best materials to enter into the composition of temporary fillings to be retained for a minimum of three years? Dr. Wyche.
- 3. What are the best methods of obtunding sensibility of the dentine, by either local or general means. Should arsenic ever be used? Dr. Wright.

Prosthetic Dentistry, including Crown and Bridge Work.— M. L. Culbreth, Whiteville, Chairman; T. M. Hunter, Fayetteville; W. J. Conrad, Winston; J. H. London, Raleigh; C. L. Alexander, Charlotte.

- 1. What are the best forms of partial lower dentures, and the methods of constructing the same? Dr. Culbreth.
 - 2. Taking impressions. Dr. Hunter.
- 3. The Marshall anchor plate and partial plates in general. Dr. London.
 - 4. Crown and bridge work. Dr. Alexander.

Orthodontia.—J. F. Griffith, Salisbury, Chairman; V. E. Turner, Raleigh; H. C. Pitts, High Point; E. E. Murray, Plymouth; Luther White, Charlotte; C. W. Bradsher, Bushy Fork.

Oral Surgery.—W. H. Hoffman, Charlotte, Chairman; A. M. Baldwin, Wilmington; J. N. Hester, Reidsville; J. A. Ballentine, Jonesboro; T. W. Harris, Littleton; W. H. Edwards, Wake Forest.

Materials and Appliances.—J. W. Holt, Goldsboro, Chairman; C. J. Watkins, Winston; J. B. Little, Newton; J. A.

Hurdle, Milton; R. L. Ramsay, Salisbury; J. C. Goodwin, Dunn.

Dental Prophylaxis.—J. F. Ramsay, Asheville, Chairman; Wm. Lynch, Durham; J. M. Parker, Goldsboro; R. M. Morrow, Burlington, G. B. Patterson, Fayetteville; S. W. Gregory, Gregory, N. C.

Anatomy and Physiology.—C. A. Rominger, Reidsville, Chairman; J. H. Benton, Newburne; J. S. Spurgeon, Hillsboro; Frank Boyette, Clinton; W. B. Murphey, Clear Run; H. D. Harper, Kinston.

Yours cordially,

F. S. HARRIS, For the Executive Committee.

ALABAMA STATE DENTAL SOCIETY.

The Twenty-fourth Annual Meeting of the Alabama State Dental Association will be held in the parlors of the Caldwell Hotel, Birmingham, Ala., on the 11th to 14th of April, 1893. If you are a member, it is your duty, if possibe, to be present. If you are not a member you are most cordially invited to attend.

S. W. FOSTER,

Secretary.

SPECIAL NOTICE.—The State Board of Dental Examiners will meet at same place on Monday the 10th day of April. All those desiring to obtain license to practice in this State must be on hand. All must have license. None are exempt.

RAILROAD RATES.—All roads within the State give one and one-third fare round trip. Parties coming from out of State should purchase tickets over the L. & N. or Queen and Crescent routes, as they are the only lines giving rates beyond State limit. Be sure to get your certificate from agent at starting point, which will enable you to return at one-third fare.

OFFICERS.—Dr. C. L. Boyd, President, Eufaula, Ala.; Dr. J. H. Allen, First Vice-President, Birmingham, Ala.; Dr. R. A. Rush, Second Vice-President, Selma, Ala.; Dr. G. M. Rousseau, Treasurer, Montgomery, Ala.; Dr. S. W. Foster, Secretary, Decatur, Ala.

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STATE BOARD DENTAL EXAMINERS.-Dr. E. S. Chisholm

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COMMITTEES.

Committee on Physiology and Etiology.—J. M. Clark, Chairman; R. L. Allen, L. H. Rambo, Geo. Eubank.

Committee on Dental Pathology and Surgery.—J. S. Bailey, Chairman; J. A. Frazier, E. Wagner, P. R. Tunstall.

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man; G. M. Taylor, T. S. Jordan, R. U. Duboise.

Committee on Ethics.—G. M. Rousseau, Chairman; H. D. Boyd, J. T. Floyd.

Committee on Prosthetic Dentistry.—A. A. Pearson,

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Committee on Dental Education and Literature.—J. C. Wilkerson, Chairman; W. E. Proctor, J. T. Stuart, J. E. Frazier.

Committee on Theory and practice.—G. W. Slaughter, Chairman; R. B. Chapman, U. I. Crumption, J. G. Chisholm.

Committee on Essays and voluntary Papers.—T. P. Whitby, Chairman; R. Y. Jones, F. B. McCaskey, J. S. Hill.

Committee on Clinics.—A. Eubank, Chairman; R. C. Young, W. A. Patrick, C. A. Merrill.

Committee on Arrangements.—J. H. Allen, Chairman; W, S. Talley, J. M. Lunquist, S. W. Yarborough.

ALABAMA COLLEGE OF DENTAL SURGERY.

The Commencement Exercises of the Alabama College of Dental Surgery, Bridgeport, Alabama, were held at the Aldhouse Building February 24, 1893.

Degrees of D. D. S. were conferred by Chas. A. Holmes, President of the Board of Trustees, upon the following candidates, who had completed the third term: A. Irene Yokum, Sanford W. Allen and Henry Clay Stephens.

Addresses were made by W. K. Spiller, Dean; W. A. Cook, D. D.; T. M. Allen, D. D. S.; and the President of the

Board, Chas. A. Holmes.

Gold medals were awarded as follows: "Founders Medal," best general average, A. Irene Yokum; best Gold Filling,

Sanford W. Allen; best examinations, Anatomy and Physiology, A. Irene Yokum.

MATRICULANTS.

S. W. Allen, W. H. H. Brown, H. M. Chester, T. E. Garrett, W. L. Helms, F. C. Holmes, J. P. Lovett, H. Renker, H. C. Stephens, B. L. Stinson, W. P. Stinson, E. R. Van Diver, M. L. Wade, W. A. Wood and A. Irene Yokum.

This college complies with all the rules of the Association

of Dental Faculties.

Publisher's Notices.

Do not fail to note our liberal offer of splendid. "Leisure Hour" literature to cash subscribers. This is perhaps the greatest literary offer you will have made you at any time. If you do not read yourself, you need books for your patients to read, and their friends while waiting. See advertisement.

THE SOUTHERN DENTAL JOURNAL will be represented at all the Southern State meetings. Give in your subscription and secure our great book offer.

The JOURNAL is issued on the 15th of each month instead of the 1st. We make this announcement as some of our subscribers look for it on the 1st.

Book Reviews.

A Practical Treatise on Crown and Bridge Work.—By George Evans. Third edition, revised and enlarged, with 631 ilustrations. The S. S. White Dental Manufacturing Co., Phil-

delphia, Pa., 1893.

The first edition of this valuable work was written in 1888 when bridge work was comparatively little known or practised outside of cities, and doubtless has been largely instrumental in increasing interest in this special practice and in placing the requisite knowledge of its principles within reach of the profession generally. The profession was greatly in need of just such a work, and now that this practice has become so general and its success recognized and endorsed by the profession generally, it behooves every practitioner however remote, to avail himself of every opportunity to obtain knowledge on this branch of practice, and we can safely assert that there is no work that so completely and

thoroughly covers the field as this work of Dr. Evans. The present work has been enlarged and improved, containing 100 pages more than the first and sixty pages more than the second. Some of the old matter has been cut out and a great deal re-written and re arranged, and all the recent developments added and illustrated. This is a valuable text book for the student, and practitioners cannot fail to find something in its pages to interest them. Being the only work of its kind which treats fully of this important branch of practice, colleges will soon find it to their advantage to adopt it as a text book and the author has had an eye single to this purpose in arranging the present volume.

The third edition of this invaluable work has been received, and like the others, it is indispensable to the busy practitioner who wants to keep in the procession in this rapid march to scientific perfection in dentistry. It seems that the busy editor has let nothing escape his eye that has transpired during the year of a practical nature. The beauty of the work is that you get the entire amount of practical matter that has appeared in all the dental journals during the year, splendidly illustrated, all cut down and condensed, yet fully explained, so that you do not have to wade through pages of

Catching's Compendium of Practical Dentistry for 1892.— B. H. Catching, D. D. S., Editor and Publisher, Atlanta, Ga.

superfluous language and flowery speech to perhaps get one or two ideas. The seeds are all carefully separated from the chaff, and, as a work of reference for practical ideas, it cannot be equalled, and no practitioner can afford to be without it. I am only sorry the idea was not thought of and carried into execution twenty years ago, so that I might have twenty years of compact knowledge stowed away for ready reference. The practitioner who fails to subscribe for it stands in his own light. Send \$2.50 to Dr. B. H. Catching, Atlanta, Ga., and receive the 1892 volume by return mail.

Lippincott's Maganzine for March, 1893.—Contents:—Waring's Peril, Captain Charles King, U. S. A.; The Newspaper Woman's Story, (Journalist Series) (Illustrated) Elizabeth G. Jordan; The Light-House, (Poem) Edith M. Thomas; Hope Deferred, (Illustrated) Lillian A. North; Some Queer Trades, Charles Robinson; A Rose, (Poem) Florence Earle Coates; Marie Burroughs, (Portrait) Robert Edgarton; A Rose of the Mire, (Illustrated) (Lippincott's Notable Stories) Kate Jordan; The Ripples and the Pool, (Poem) Herbert Ditchett; The Selfishness of "Mourning," C. H. Crandall; Our Side of the Question, Louise Stockton; Men of the Day, M. Crofton; With the Wits, (Illustrated by Leading Artists).

Southern Dental Journal.

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Original.

Editor Southern Dental Journal.

DEAR SIR:—I notice in DENTAL JOURNALS of recent dates considerable talk and interest manifested on the subject of Nitrate of Silver as a remedy for treatment of teeth. I am glad it is so, and to know so much interest is felt and expressed in relation to a resurrected, well tried and useful remedy of many years ago, dating far back in the practice of dentistry in this country. Like many other remedies long known of and rightly appreciated by some, but not in general use. It has been about forty-six years since I learned through Dr. John B. McCall, an itinerant practitioner of dentistry in the Western section of Tennessee, of the use of Nitrate of Silver in dental practice. I was then a second course student in medicine.

I graduated in dentistry in 1853, and when I commenced practice a few weeks after graduating, I commenced the use of *Nitrate of Silver* and have always found it useful and reliable as a remedy in the practice of dentistry, and have, as is my custom with all remedies and modes of practice that have proven satisfactory, freely dispensed to brother dentists.

More than a quarter of a century ago I addressed a letter to an old personal and professional friend, Dr. Sam'l Cuttar, of Holly Springs, Miss., informing him of my experience with *Nitrate of Silver* and *Sulphuric Acid*, and ventured the opinion that with the right application of the two remedies more could be accomplished for the healthful preservation of the teeth and gums than with all known remedies. In

reply he stated that he had never used sulphuric acid for any purpose as a remedy in the practice of dentistry and would very much question the propriety of using it on teeth and gums as I advised, but had used Nitrate of Silver freely for some years and was always satisfied with results, never having witnessed any ill effects, and that he considered it the best remedy known, to allay sensitiveness on grinding surface of teeth and at margin of gums around the necks of teeth. Many others then practicing doubtless were familiar with the remedy and could have related like experience.

In those days frequent intercourse and the free interchange of ideas and features of practice, was not as it is to-day. Professional reunions were not so common and frequent, and correspondence was limited. In the earlier days of dentistry, only as far back as thirty-five or forty years ago, there were but few dental journals, and dental Societies or Associations for the introduction and discussion of professional subjects. remedies, etc, and for the dissemination of principles and features in practice, as to use and merit of remedies and material, and facts in practice useful to all, as later on and at present, when we are often overstocked with much that is good, and very much that is worthless, until it is somewhat of a task to analyze and separate so as to utilize for benefit. But the task can be accomplished, and after all in the interest of dentistry and for the comfort of the human family, these are better days than those and we have great cause to feel thankful. Evolution is doing its work, and progress is developing and advancing rapidly. What our profession is to be in the course of a few more decades, we are not able to predict, but will hope for great developments and a high position.

My first experiment with Nitrate of Silver in treating decay and trying to preserve teeth without filling, dates back about thirty-five years. The patient was a lad of sixteen years, physique good, health excellent. All of the teeth, upper and lower, in front of the bicuspids, were very defective, white decay, embracing much surface but not deep. To have filled with gold would have been tedious and difficult, and would have incurred an expense greatly in excess of his means. I therefore decided to test the virtue of Nitrate of

Silver, and realized in the course of years that it served a good purpose, and could be relied upon under many circumstances. I applied the remedy as effectively as posssible to surface of decays, waited until next day when, with chisels, excavators and burs, I removed rough edges of cavities and much of the decomposed substance, and with very slight discomfort to patient. Re-applied the remedy several times, each time cutting, dressing and smoothing decayed surface until final finish. I polished as best I could with stick and pulverized pumice. After the first application and cutting away decay, there was very little discomfort to patient. Five or six years after treatment, the teeth were comfortably free from removal or increase of decay, and presented much better appearance than before treatment.

My next experiment was for a male adult, twenty-eight or thirty years of age. Cavity of right approximal surface of left superior lateral incisor, white decay, nerve nearly exposed. He was awaiting to have the nerve treated and cavity filled, but desired that I would so treat the tooth as to prevent pain, if possible, for a few months. I treated with nitrate silver, as follows: twirled cotton around a small bur drill, moistened the cotton with a saturate solution of nitrate silver. Then applied the cotton to fine scrapings of nitrate silver and conveyed to cavity, and held there for a few moments, then closed cavity with beeswax, and let remain until following day. When I removed the beeswax and commenced to excavate for removal of decay, there was but slight sensation compared to sensation day previous. I treated as before, and repeated day following, and trimmed and dressed cavity to best advantage to prevent retention of foreign substances, and advised to have the cavity filled at earliest convenience. He left in the course of a few weeks to join his regiment in Virginia, and it was several years before I saw him again. I questioned to know the fate of the tooth, and if the cavity had been filled. He replied that it had not; that he did not think it necessary as the tooth had not given him further trouble, and the decay had not increased, as he could detect. Upon examination, several days later, I found it as represented, free from sensitiveness, and no increase of decay. Several years later the

tooth was in a favorable state of preservation, and doing good service. I could enumerate many corresponding cases, confirming the good effect of *nitrate of silver* on caries, but enough has probably been said to encourage or tempt some to experiment for results, and when they do, will find it, I presume, as I have stated.

To be convinced of the true merit of any remedy, appropriate test must be made; not only one test, but often a multiplicity of tests are requisite to produce conviction and establish faith. This is right.

Some you know, are slow to believe and take hold of facts plainly and honestly stated, even when they see with their eyes wide open, therefore the slow process of experimenting and testing results. Possibly it is for the best, for when a fact stated is thus treated and established, it strengthens and thus becomes valuable, and many profit by it.

In applying nitrate of silver to cavities to arrest decay, or to prepare for painless excavating and removal of decay, I twirl cotton on a round-head bur drill (size to suit cavity,) moisten the cotton with saturate solution of the remedy, then touch the powder (scraped or crushed) of same, convey to cavity, rotate and keep in cavity a few moments, then dry cavity with a pellet of bibulous paper, and fill cavity with beeswax to preclude moisture, until following day, or for several days, if necessary. Around the necks of teeth near the gums, I apply the remedy in the same way, but greater length of time, as I do not, in such cases, use beeswax.

On the cutting edges, or grinding surface of the teeth, much worn away and sensitive, as is frequently seen, I apply the remedy in the stick form, direct to the sensitive surface for a few (three to five) seconds, which is ordinarily sufficient to abate all sensitiveness.

For removal of discoloration produced by application of nitrate of silver, a saturate solution of iodide potassium, stick and pulverized pumice or silex is all that is requisite.

To guard against the possibility of injury to mucous membrane by scraping particles of *nitrate of silver*, it is well to have at hand a strong solution of table salt. Quickly applied, it will prevent injury to the membrane.

In conclusion, I can say truthfully, I have never known injury to teeth by application of *nitrate silver*, but results always satisfactory, as with sulphuric acid in treatment of pyoarrhœa alveolaris.

It is not a new remedy, but an old one, received and made more of than formerly.

The man who first used it, and recommended use of it in treatment of teeth, possibly was buried a hundred years ago or more. There is no need now of questioning and disputing as to who first introduced the remedy. He is not here to assert his claim and receive thanks for the introduction of a good remedy.

To Dr. Stebbins, for resurrecting and infusing new life, thanks are due, and should be freely awarded by the profession at large.

The remedy is one of great power and merit. Give it a trial, watch results, and if satisfactory, say so. Use freely in practice, and recommend its use to others, and so do by all well endorsed and tested remedies, that prove valuable in your hands. That will be true conservatism, and conservatism must be the foundation stone of scientific, practical, common-sense practice of dentistry, sooner or later, in this and all countries.

B. F. Arrington.

HOW I TREATED AN ABSCESS.

BY J. K. MOOSE, D. D. S.

Mr. C. called on me last August to get relief from an aching tooth. Upon examination I found the right inf. 2nd bicuspid, abscessed. I opened the cavity in crown and washed out canal with warm water; then removed as much of dead nerve as I could. I then tried to force warm water through apcal foramen, but failed. I failed to get the point of the smallest instrument through foramen. I also tried, but failed, with Gates-Glidden drills.

I picked up my Hypodermic syringe, loaded it with a drop or two each of creosote and Tr. Iodine, passed the point of needle through open sinus, and along the tube until it came in contact with root of tooth; with some force, I emptied the contents of syringe into the asbcess, letting the surplus run out and catching it on cotton.

With floss silk, saturated in creosote, I filled the nerve canal, finishing the cavity in crown with Hill's stopping.

I saw the patient seven months after, and the abscess had disappeared; the sinus had healed; the gums looked natural and healthy, and the tooth had not given a moment's trouble since.

I don't know how it is with others, but that treatment was a complete success for that tooth.

IMPORTANT INFORMATION REGARDING GLYCOZONE.

Glycozone is a stable compound resulting from the chemical reaction which takes place when C. P. glycerine is submitted under special conditions, to the action of fifteen times its own volume of ozone, under normal atmospheric pressure at a temperature of O degrees C.

The presence of water (and other foreign substances) in the glycerine, changes the nature of this reaction, so that instead of producing glycozone, we obtain formic acid, glyceric acid, and other secondary products having deleterious effects upon the animal cells.

Glycozone being hydroscopic, must be tightly corked, so as to avoid being deteriorated by the moisture contained in the atmosphere.

Although glycozone absorbs water readily, it does not deteriorate when kept at a temperature of 110 degrees F. as long as it retains its proper anhydrous condition.

The therapeutic properties of glycozone and Marchand's peroxide of hydrogen (medicinal) differ in the following particulars:

Peroxide of hydrogen (medicinal) instantly destroys the morbid elements of diseased surfaces of the skin or of the mucous membrane with which it comes in contact, leaving the tissues beneath in a healthy condition.

On the contrary, glycozone acts more slowly, but not less certain, as a stimulant to healthy granulations. Its healing action upon diseased mucous membrane is powerful and harmless in the treatment of inflammatory diseases of the stom-

ach. In such cases it gives an immediate relief to the patient. (See Dyspepsia, page 27.)

In chronic inflammation of the intestines, a rectal injection administered every day with a mixture composed of

soon relieves obstinate conditions.

A syringe made exclusively of hard rubber or glass, should be used in all instances where either peroxide of hydrogen (medicinal) or glycozone is used as an enema.

After any diseased or suppurating surface has been cleansed by peroxide of hydrogen (medicinal) the application of glycozone stimulates healthy action, and accelerates a cure.

GENERAL DIRECTIONS FOR USE.—Glycozone may be given for diseases of the stomach, in doses of one to two teaspoonfuls in a wine-glassful of water immediately after each meal. In catarrhal diseases, it should be applied in full strength as often as required.

As an application to wounds and suppurating surfaces it should be used without dilution.

CAUTION.—Glycozone is a peculiar chemical compound, and not a mixture of peroxide of hydrogen (medicinal) with glycerine.

These two liquids when mixed do not form a stable product, but develop substances which have injurious effects upon animal cells.

Such a mixture when freshly made, has no healing properties similar to glycozone. On the contrary, glycozone is stable, harmless and always effective.

Alabama College of Dental Surgery, Bridgeport, Ala., will open for the regular Session of 1893-94, October 2d, 1893. Infirmary will be open for Clinical practice, September 1st, 1893. For full particulars address'

W. K. SPILLER, Dean.

Ripans Tabules cure jaundice.

Selections.

MANUAL TRAINING.

BY S. B. PALMER, M.D.S., SYRACUSE, N. Y.

The addition of the third year to a course in dental colleges was a step in the right direction for progress in dental education.

With one-third more time for instruction, and to answer the demand for higher skill in the working of metals and in the construction of crowns and bridges, a course of study could be arranged to meet conditions at present not provided for.

There is not sufficient time spent with students in manual training to enable them to meet the requirements of practice. It is true this education may be acquired by a special course, at an expense which few can afford. Mechanical training comes in at the close of study rather than in the early part of the first term, so that the student is not able to enjoy its benefits throughout the full course.

I know from experience with the teaching of students early in my practice that a systematic course of study can be so arranged that manual training can be combined with the other studies and become pastime or recreation rather than a task. In training the fingers, work must be performed and directed in a way to produce something useful for the worker, and when this is done the mind becomes interested, the real labor forgotten.

I will venture to offer a few suggestions how it is possible to make mechanical training a recreation, and will simply mention what was laid out for students in the office thirtyfive years ago.

Attention was first called to the furnishings and fixtures in the laboratory, then to the tools, and the advice given, "You will need all these, so commence and make for yourself what you can, and add as you may learn more, and make other things, until you have done all that the tools will enable you to do." Before the time of pupilage was over nearly every one had a complete outfit, with perhaps the ad-

ditional assistance of a machinist to construct lathes, etc. The work was not limited to the laboratory. Dr. Hodson, of New York, is proud of a set of ivory-handled socket pluggers which are now in use by him, made during his office study in Syracuse.

For over twenty-five years I have not taken students, believing it best that young men intending to enter the profession should go at once to college rather than waste time in office service. In theory I was right; observation convinces me that practically I was wrong. The office student after graduating is much better prepared to enter practice than one who graduates without previous training.

It is not the professional teaching received in an office that places him in advance; many things must be unlearned, or still worse are retained; but the manual training received. which a private laboratory offers, is not enjoyed individually when a large class is being taught. In proof that mechanical training is of importance, though it be not directly in the line of college instruction, I will cite two cases. Two young men, by my advice, entered dental college without office study; both were limited in means and alike ambitious to succeed. After graduating in the two years' course, one came to me with a cast, for advice in a case of regulating. The case called for simple gold appliance that required soldering in its construction. The young man said, "I have my diploma, but it is all a farce. I know nothing practically about soldering or working gold, and have it yet to learn." The other young man was proud to inform me at the close of his first term that he had added to his means by making, or teaching the boys how to make, metal cases. Where was the difference? The latter was a son of a fine mechanic, a modelmaker, whose shop was a part of his dwelling, the boy's play-house; the use of tools was familiar to him, and once shown a thing to be made, and told how to make it, he could duplicate it. When a practical jeweller takes up dentistry he asks no one to assist him in constructing deposit cases.

Of course there will need to be an outlay on the part of the college to furnish facilities for this training, but there is demand for it, and there will be a supply. If colleges cannot do it individually, they could unite upon a plan to recom-

mend the first year's course at a manual training college, and receive the diploma from that institution as one year on the course, and thus require but two terms. The course of study should be after that of the Chicago training school, or that of some universities, in the course of civil and electrical engineering, where each student has practical instructions in blacksmithing, wood-working, moulding, casting, the use of engine lathes, etc. The dental student should have for his lessons the making of things required in practice after graduating; he should make patterns for flasks for vulcanizing, turn out handles for bench tools, cut strips of brass, bend, solder, and turn up ferrules to fit the handle, and, later on, when chemistry is reached, nickel-plate his brass productions. He should cast flasks, forge bolts, and fit up the same; he should be taught to make and temper excavators and other fine instruments. This is not recommended for the saving of money, as no operator can afford to make fine tools, but as a part of educational training to meet emergencies that often occur in practice.

The above suggestions are based upon practical knowledge that students can be taught to work out their own manual training and regard it as pastime and not a task. What is true of private teaching can be enlarged upon and be made equally practical in college training.—International Dental Journal.

A STUDY OF THE DISEASES OF THE PERIDENTAL MEM-BRANE, HAVING THEIR ORIGIN AT OR NEAR THE GINGIVAL MARGIN.*

BY H. A. KELLEY, D.M.D., PORTLAND, ME.

The condition I am about to consider to-night is most familiarly known to you, no doubt, as that of Riggs' disease; but it behooves us to use professional language and methods. It is the aim of science to obtain as perfect a nomenclature as possible, and it is not proper to name a disease after its demonstrator, however much we may wish to honor him. But I do not think any one name can designate the condi-



^{*} Read before the Maine Dental Society.

tions There are many under this one head, seemingly the same and yet very different; having variable symptoms and exciting causes. It seems to me much of the difference of belief in earlier times and even to-day in regard to this disease was and is due to this fact. These have not yet been classified, but are regarded as one pathological condition. Nothing but confusion can result from this, and it is not strange to find many theories in regard to it, and especially as to its origin.

It is the purpose of this paper to give certain conclusions of mine, in hopes that I may contribute something that may aid us to a clearer understanding of a disease so destructive in its results and yet so little understood.

Salivary calculus, I think all will agree, is not the cause of serious disease. It is deposited at or near the salivary ducts at the gingival margin or just above it, towards the cutting edge of the tooth. The theory of this precipitation is as follows: The saliva contains both calcium phosphate and calcium carbonate, and these are held in solution by carbonic acid before the saliva is poured into the mouth. As the saliva enters the mouth this carbonic acid escapes and the lime salts are precipitated. This may be shown experimentally by a bottle with these salts in carbonic acid solution; allow acid to escape and salts will be precipitated. As the calculus pushes the gum down new deposits form, and as a result the gum may lose its tone and thus a more or less serious state of affairs result. But I think there is no attempt of this kind of calculus to work in under the gum margin, and only by the greatest neglect can it do serious harm.

It is easily scaled away, and when so removed we find the gum underneath it in practically a healthy state,—only a more or less loss of tone being seen as there has been more or less neglect. The gum soon returns to its normal condition after its removal.

The results, possibly caused by serumic or sanguinary calculus, must be considered. First, we do not know this species of calculus comes from the serum, or even from the blood. It is only a belief based upon certain analyses. "There is no evidence that it is derived from the blood. It

It may possibly be deposited from the pus bathing the tooth and more probably from the saliva." (Truman.)

It certainly is different from ordinary tartar, and much more destructive in its results. Salivary calculus is a semisolid mass, composed chiefly of water, calcium phospate, and calcium carbonate, with a trace of calcic fluoride and magnesium phosphate. It is easily scaled away, as it does not seem to firmly adhere to the tooth as does the serumic. The latter, on the contrary, is a very hard substance, and removed only with great difficulty. It has not been analyzed, and I cannot correctly give you its constituents. What relation does this calculus bear to the disease?

In one of the latest papers on this subject, Dr. Allan says: "To me it always seems that much of the trouble that many dentists meet . . . arises from a total misconception of its origin and cause . . . I desire to state positively my belief that pyorrhœa alveolaris is always preceded by a deposit of serumal tartar." This statement he enforces later by saying, "If I had said, as a rule, the so-called pyorrhœa alveolaris had its origin in a purely local cause, or causes, and that nine out of ten times this local cause was tartar in some of its protean forms, I would have rightly stated my opinion. I go further and say the constitutional diathesis theory begs the question and cannot stand close examination. that can be said for a systemic origin is, the inflamed gingival or mucous membrane is prone to secrete lime salts, and these salts, in turn, become added causes of irritation." Dr. Allan believes the healthy mucous glands do not secrete tartar, and he regards a natural or acquired roughness of the neck of the tooth as the exciting cause of the unhealthy action of the glands that induces them to secrete the tartar. Dr. Allan says, while strongly of the opinion that this is correct, he is not sure of his position.

These are strong words and fill us full of hope that Dr. Allan has at last settled something. But this hope is quite dispelled, and we find ourselves again in doubt when, in the discussion of this paper, we hear the following from Dr. Truman: "Now, what is the origin of this pathological condition? Does it originate from tartar? Not if I understand it. Does it originate from the roughness of the gingi-

val border of the teeth that Dr. Allan mentioned? When you find a bright red line at the border-line of the gum, there is the beginning. It has nothing to do with tartar. It may come from constitutional disturbances: it may originate from some form of nephritis, or a long siege of sick-Immediately succeeding we have a development of micro-organic life. This disease has its origin in inflammation of the periosteum or pericementum of the roots of the There is no question about that. It naturally follows if we are to treat the teeth properly we must direct our attention to the micro-organic life first, and not to the tartar. which is secondary. Where tartar is, in my judgment, there cannot arise—does not arise—this pathological condition." Dr. Sudduth agrees that tartar is secondary to the disease, but says. "The initial phase we do not know. No man has ever been able to tell the cause of the disease; there is a catarrhal process, but what causes that to be set up has not as yet been solved. The deposits on the roots is a result of this catarrhal process. First, there is irritation, then follows micro-organisms, and these, in turn, become a source of irritation: but their direct connection with the disease has not been determined."

Many of us think the very worst cases we have ever seen were entirely devoid of tartar, either serumal or any other kind. Now, it seems to me, in this disease, accompanied by deposits of tartar, we have what I consider one of two conditions that are described by various authors by the same name; and it also seems that whatever may be the predisposing cause, the exciting cause is the so-called serumal tartar.

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In support of this statement I fear I can but repeat the old reasons for and against the local causation of the disease, but hope to be able to present them in a way that will convince you of their truth. It is my belief, as stated by Dr. Allan, that those persons that support the systemic theory only beg the question. It is so satisfying to throw the disease back on to the system. But what reason have we for so doing? We have a pathological state here, always accompanied by calculus, which may be cured by the simple removal of the calculus, nothing else being necessary.

The only way it can be treated is by the complete removal of this, and by so much as you thoroughly accomplish that will you succeed. Could anything point more clearly to the cause of the disease? Systemic conditions are but side issues; important, but not the origin. In support of this statement I need to present but the one fact, a complete removal of the calculus will effect a cure. Not one case is on record of failure where this was thoroughly done. If the system was at fault there would be exceptions to this rule. Dr. W. D. Miller says, "My view is, three factors must be taken into consideration in each case of pyorrhœa alveolaris,—first, predisposition; second, local irritation; third, fungi."

I pass now to the last form of the conditions we are studying, the condition called phagedenic pericementitis. Many have adopted this name to designate all the lesions we have been considering. I prefer to use it as descriptive of this one condition. This, then, as the term implies, is an inflammation of the pericementum, resulting in rapid ulceration. The gums are but slightly affected. Thin flat instruments can be passed farther up the root than is possible in a normal condition. The destruction of the tissues of the peridental membrane has begun, and the pockets, that I mentioned as indicative of the disease, are forming.

This destructive process proceeds in the direction of the fibres of the membrane,—that is, towards the apex of the root. It may affect but one side of the root, and there may be pockets with healthy membrane between; but usually the affected tract widens and destroys the entire root membrane. Although it seems to be an infectious disease, the fact is not fully established. There is little or no recession of the gum and the condition may be overlooked except a very careful examination be made. As a result of the loss of the membrane, the alveolar process disappears.

I have thus briefly described the simplest form of phagedenic pericementitis, but by far the greater number of cases are complications of this disease and due to calcic inflammation.

I have said of this form I believed the exciting cause to be calculus, but as the disease may certainly begin and run its course without any deposition of calculus, we must turn elsewhere for the origin. And it seems highly probable it is due to fungi or some form of micro-organism, and as I have said is, or seems to be, infectious. Dr. Black thought, at one time, he had isolated the fungus; but further investigation did not confirm his hopes. Miller has not been able to demonstrate the special organism producing it.

The treatment will be more in the line of suggestive hints than an attempt to describe any special mode. When the pathology is understood the treatment becomes easy. Until this is accomplished our treatment must be ineffectual. Where we are not sure of our foe it is hard to choose our weapons of offence and defence.

The conditions due to calculus are simple, and demand for their cure the exercise of surgical means and methods. Remove the calculus and all diseased alveolus (this must be thoroughly done by giving several sittings); establish drainage; accomplish depletion and give the affected teeth rest, and there you have the means of a cure. In proportion to the thoroughness with which this line of treatment is carried out will be your success. No medication is necessary if this treatment be thorough. But it is well to give the system tonics and use stimulants and antiseptics locally.

In the condition called phagedenic pericementitis the first thing is to remove any deposits that may be present as complications. After this is thoroughly accomplished it is absolutely necessary to resort to medicinal treatment. in well-developed cases no chance of nature effecting a cure even with the calculus entirely removed, for the exciting cause still remains. The pericementum is being disintegrated and the alveolar wall absorbed. We must remove the diseased parts with instruments. Dr. Black would not injure the gum margin, but drainage must be secured, and this must be obtained at whatever cost. Then the lacerated pockets should be washed out to remove the debris and For this use a solution of mercuric chloride in blood-clots. peroxide of hydrogen, one grain to the ounce. If there is great congestion of the gum, apply a thirty per cent, solution of chloride of zinc deep down into the pockets. proceed with Dr. Black's one, two, three solution.

Oil of cinnamon, 1; Carbolic acid, cryst., 2; Oil of gaultheria, 3.

Inject this into the pockets, once in four days, full strength, and supply the patient with the same solution diluted to one-half its strength with oil of lemon or oil of anise—I prefer the former—to be used as a mouth-wash. The patient must be watched carefully, and great care must be taken to prevent a return of the irritation of the gum margin, and cleanliness must be insisted upon, with examinations continued indefinitely, for I do not believe a cure could be absolutely promised with unfavorable conditions likely to recur.—In Dental Journal.

UNNECESSARY PAIN IN DENTAL OPERATIONS.*

BY JAMES A. REILLY, D.M.D.

It is not my intention this evening to attack any established theories or to attempt to overthrow any cherished opinions or prejudices. I simply desire to call your attention to a few points in every-day practice, and would prefer to suggest a few things you ought not to do rather than those you should do. Indeed, I am to address you from the standpoint of a patient in the chair rather than as the operator at its side.

One forenoon during my senior year at the Harvard Dental School, and while in charge of the dental department of the Bennet Street Dispensary, among the numerous patients was a lad of twelve or thirteen years. He went through the usual preliminaries required in order to have an inferior bicuspid tooth extracted. The operator mechanically picked up his mirror and pliers to examine the tooth, or what remained of it, and almost simultaneously with their introduction into the boy's mouth there was a terrific scream and a plunge that almost carried him through the window. An attempt at extraction by a street dentist had resulted in the removal of the crown, leaving the entire coronal portion of the pulp standing unprotected. The dentist simply plunged his pliers into the mass of living tissue. Was not that an abuse utterly

^{*}Read at a meeting of the American Academy of Dental Science held in Boston, December 7, 1892.

reprehensible on his part? I think it was, and so would you, I believe, had you been the sufferer. Yet we are doing just such things every day in one form or another.

That "familiarity breeds contempt" is nowhere more noticeable than in the use of dental instruments and appliances. Not long since, a gentleman somewhat prominent in dental organizations told me he had not a dozen excavators in his possession; that he excavated all his cavities with the aid of the dental engine, and wished to wager me that I could not find a cavity in a tooth that he could not reach and prepare as well, if not better, with the engine than it could be accomplished with hand excavators. Upon being questioned if his patients did not complain of being hurt, he replied. "Confound the patients! my duty is to protect myself." If this gentleman could but be patient and operator at the same time. I have no doubt that he would be easily induced to trade some of his burs for hand excavators. Has he not, to say the least, become too "familiar" with his engine? This I consider an extreme case of abuse, for, allowing for a moment that all cavities may be reached (which I do not believe, unless he destroys a vast quantity of sound tooth substance,) the time that is gained by its use is but a trifling compensation for the torture that is thus inflicted on children and excessively nervous adults, and I suppose he has such patients. He may run his engine slowly, use the sharpest burs and all the obtundents at his command, but does he diminish the loss of tooth structure thereby, or reduce the inherent antipathy to dental operations which the average patient has? Does he not absolutely destroy the last vestige of confidence the little one may possess who has been beguiled into the chair by its parent with unqualified assurance that "it will not hurt a bit?"

Another appurtenance, no less barbarous in some of the details than the untimely use of the dental engine, is the rubber dam. A prominent writer says, if it is at all difficult to apply, the rubber dam should not be used in the cases of the very young, very sensitive, or very nervous patients. How many of as draw the line at these classes? It is not my intention to point out the occasions for its use or to urge upon you its abandonment, for I consider it a sine qua

non to good results in numberless cases. But I would like to call your attention to the contempt for your patients' feelings that a "familiarity" with its application breeds.

You are all aware how quickly you jerk your head away if by accident the floss slips too rapidly between your own teeth and burrows itself in your gums while you are cleansing them. How often the same thing is perpetrated on your patients, and nothing thought of it, by you at least, while you are laying coil after coil of cable on teeth that oftentimes do not require ligatures! Frequently, indeed, they serve only to obstruct access to the cavity. We all know or should know, that with holes of proper size and shape in the dam the employment of ligatures is necessary only in a limited number of cases, provided the tartar has been removed from about the margins of the gum. But for pure, unalloyed torture, permit me to present to your consideration a clamp and an awkward or heavy-handed operator, and I think there are a few such in the profession.

I speak from experience, for it once fell to my lot to sit in the chair with a clamp on an inferior wisdom tooth, compelling me to keep open house during the space of three and one half hours. My knowledge now teaches me that it was entirely unnecessary, and that the cavity might have been filled, with the aid of napkins, in less time than it took to get the rubber and clamp adjusted, and with infinitely less pain and discomfort.

Now, I do not maintain that the clamp should be relegated into "innocuous desuetude," but I do say that extreme care should be exercised in selecting the proper ones to be used in each particular case, so that they may be easily adjusted, and that the most delicate and extreme accuracy of manipulation possible be employed while placing them upon the teeth. I know of nothing more repellant to the average patient than the rubber dam and its accompaniments; therefore I think it behooves us to manifest a little compassion by dispensing with the use of the clamp, or the ligature, and even the dam itself, whenever it is practicable.

Another medium for pain-culture, and one which gives ample opportunity for the application of all the reserve abuse we may have stored away, is obtained during a course of regulating. A great deal of pain and soreness of course, it is needless for me to say, is unavoidable while moving the teeth about, but there is also a large amount carelessly inflicted by over-anxious operators, too eager to accomplish in one day what should take a week, and again, doing to-day what they must undo to-morrow.

I once saw a case of regulating that was worthy of the attention of the society for the suppression of cruelty to children. The teeth were very much displaced, and appliances were adjusted to almost all the teeth simultaneously. Too much force was applied, and too long an interval allowed to elapse before changing, so that when I saw the mouth there was scarcely a tooth in the superior maxilla that could not have been easily removed with the fingers. articulation the patient could not bring the teeth together without suffering intense pain. And all this under the direction of a reputed skilful operator. The effect of such operations is most pernicious, for the impression they produce on the patient's mind is often more enduring than what they effect in the physiognomy, and frequently nothing short of an exposed pulp will permit further dental operations during those years when the closest scrutiny and care should be exercised.

This, then, is the point I wish to make regarding the lack of care to avoid pain during regulating; that oftentimes nothing is gained by the operation, because if you succeed in holding your young patient's interest to a successful termination of the work you have also generated mentally such an intense dread and abhorrence of you and your benefactions, that it is not until caries has obtained a firm foothold, and sometimes even demolished that which for months engaged all your energies to perfect and beautify, that your ministrations are again solicited. Would it not be more preferable to "make haste more slowly," and retain the confidence of the little ones, even at the cost of not accomplishing quite as much as you would wish to do at that time? This same principle is equally applicable to the filling of young teeth, and I frequently do nothing more at the first sitting than to cleanse a few teeth with the stick, or wipe out a cavity with an antiseptic and insert a little

gutta-percha or cement, sometimes without removing any decay whatever. For I consider my time well employed if I can succeed in dispelling this dread which always possesses them at the first sitting.

There are many minor things in our routine work that might be dilated upon upon in a paper of this kind which are really painful, although to us they seem very trifling, and if our patients shrink from them we are prone to ascribe it to fear or timidity, when we really are inflicting pain. the habits of some dentists one would suppose the patient had no rights that the dentist should respect. He lolls over and leans on his patient; making of their head a cushion and support for his arm till the patient is well nigh exhausted. It does not diminish the discomfort any, to know that it is sometimes done unconsciously. That much inconvenience and unnecessary pain are caused by our neglect to scrutinize our processes and individual peculiarities, or by failure to keep them before our eyes, is not to be denied. unnecessary pain frequently caused while putting on gold caps, bridges, and collars for crowns, without first applying cocaine to the gum margin? Is it not unnecessary pain to continue nibbling at an exposed pulp that had not wholly succumbed to the arsenious paste? I think you will agree with me that to catch the lip beneath the thumb while making it a fulcrum against the teeth is rather painful, and that to wash out a cavity with cold instead of tepid water may produce avoidable pain.

How common an experience it is to hear an outcry, or see a twitching of the head and body immediately upon using the chip-blower while excavating! It does not take place so much if we use warm air. Yet, do we always use it? Is it not positively abusive to whack away at a tooth for hours with the automatic mallet, when hand pluggers might be used with so much more comfort, at least during the first part of the filling? Is it not an abuse to inflict quick wedging as ordinarily performed? Is it not an abuse in taking full impressions for artificial dentures, to overflow the plaster from your impression-cup into the throat of your patient, when a smaller quantity would produce a much better result by giving a more accurate impression because

the parts are not so likely to be disturbed by retching and coughing? Is it not abusive for a dentist having a strong, muscular hand, with a heavy touch and a vise-like grip, to rush and hurry through his work as if he were under the impulse of electricity? My observations lead me to believe that rapid operators hurt more than slow ones. I believe that after a fair rate of speed has been attained, any acceleration of it is obtained only at the expense of delicacy of touch and of the patient's nervous system.

The conclusions I drew from my experience as a patient was, that more pain and discomfort arose from outside influences, if I may so term them, than from the actual preparation of the tooth to be filled. It is within the ability of everybody to cultivate a delicacy of manipulation, if they do not naturally possess it, and delicate manipulation is a powerful factor in dispelling the dread so universal in the minds of the people relative to dentistry. As President Elliot said the other day at the meeting in behalf of Harvard's new dental school, "It is the dread of pain which makes people miserable."—In Dental Journal.

BACTERIA.

Putrefaction is always accompanied by the presence of bacteria; and bacteriologists maintain that this process cannot take place without the presence of micro-organisms. has been reasonably demonstrated that micro-organisms are the definite cause of specific diseases. The cholera bacillus has been successfully isolated, and the disease produced in healthy animals by inoculation. This is also true of many others; anthrax typhoid fever, consumption, etc., can be produced by inoculating healthy animals with pure specimens of the micro-organisms found in these diseases. It is the confident expectation of bacteriologists that characteristic bacteria of every known disease will be determined by further research. Just how these minute organisms produce such destructive changes in living tissue is not definitely known. It has been observed that conditions favorable to their growth are moisture, body temperature, and a favorable medium. Excessive temperature, hot or cold, will inhibit their growth,

or destroy them. 105 degrees F. will inhibit most varieties; at 32 degrees F. they will not grow. They will not grow in either an acid or alkaline medium. It is evident that the process is very closely allied if not identical with fermentation. It has been found that there is present in tissue affected with pathogenic bacteria a peculiar nitrogenous waste product, which has evidently been produced by the activity of the micro-organisms. It very closely resembles vegetable alkaloids, which are formed in putrefying mixture, and is usually poisonous. It is called a ptomain (from ptoma—a corpse) because it was first isolated from dead bodies. It is the ptomain that produces in animals the characteristic disease, poisonous or fatal results.

There exist in the body at all times various and numerous species or forms of bacteria. It is a wise provision of nature that it is so, for we find that the presence of the non-pathogenic orders have a decided tendency to modify or correct the action of the disease-producing species. The favorable conditions and presence of germs in so great a variety would seem to promise the speedy overthrow of all vital function in the tissues of the body, were it not for the fact that nature has made provision for resisting the encroachment and interference of these organisms, which is brought about principally in three ways:

First, the fluids of the body are capable of destroying them by their acid character, or prevent their growth by their alkaline reaction.

Second, the white corpuscles of the blood and the connective tissue cells have the power to destroy the bacteria by taking them into their interior and digesting them. This can only be accomplished to a definite extent, and when more bacteria are present than the cells can digest, the cells themselves give way and are destroyed by the bacteria, and we have death and the putrefactive process set up.

In the third place, the bacteria overcome and destroy each other or are destroyed by their own products. If a wound is inoculated with several kinds of bacteria, one species will gain the ascendency at the expense of the others, till it has by destruction so contaminated the media in which it is operating by its own activity and has produced a condition in which

it cannot grow; an excess of acid, or alkali, or alcohol; then its activity ceases and the germ becomes incompetent to produce its species. At this stage another kind of germ that thrives on the conditions present may take up the fight and change conditions to his own hurt or disadvantage, and he in turn is compelled to give way to a more vigorous successor.

This kind of warfare will continue indefinitely, or till by surgical and medical interference or renewed and reinforced vital function, the system is enabled to overcome the parasitic influence and re-establish a normal and vigorous functional condition.

It is at this point that the interference of the surgeon or physician is needed to turn the process in favor of the attacked structures.

That the disinfecting process may be intelligently accomplished it is not necessary that we recognize the peculiar variety of micro-organisms which may be present, as fortunately the larger number will succumb to comparatively harmless agencies, and all can be reached by drugs contained in our materia medica.

The conditions produced by the different species are varied, according to the germ, but those which are especially concerned in the formation of gases and odors are of particular interest to the dentist. But all forms are liable to produce both gases and odors under the conditions present in most dental lesions, such as putrefaction of the pulp, alveolar abscess, pyorthæ alveolaris. It is not important here to enumerate the particular action of special species or forms.

We must classify all agents or drugs which may be used to overcome the influence or results of the action of microorganisms under the general head of antizymotics, that is, agents which will prevent fermentation, for we are not justified in separating fermentation from putrefaction, for fermentation is an essential feature of putrefaction even in animal structures.

In the clinical application of antizymotics for the correction of disease, we find that all drugs and methods to be efficient must be applied in such concentration or power to effect the desired results, that continued application would result in the destruction of large amounts of valuable tissue that is

not all or only slightly affected by the encroachment of zymotic influences. And we have learned also that tissue which is not inoculated, or only slightly affected, can be kept in an aseptic condition by attenuated solutions of strong germicides or by milder agents, which we will designate antiseptics. We will, therefore, make a sub-classification of antizymotics into disinfectants and antiseptics. The disinfectant is the means whereby we aim to remove all infectious matter and agencies from the tissue; the antiseptic is the means used to preserve the cleanliness obtained by the use of the disinfectant.—Dr. N. S. Hoff, in Dental Register.

A DIFFICULT CASE TO DIAGNOSE.

BY OLIVER MARTIN, L. D. S., OTTAWA, ONT.

Some years ago Sir A. F. G. came to me suffering intensely from neuralgia on the left side of the face, extending to the crown of the head; his face was slightly distorted on that side. He had been treated externally and internally by his doctor, who came to the conclusion that it might be from his teeth, and I was recommended. I examined his teeth carefully, and found no defect, no sensitiveness on tapping each tooth on every side. There were a few small gold fillings, but none that would indicate the cause. I asked him if he could locate the starting point; he said he could not. "Probably," I remarked, "you did not think of it." "No," he said, "it begins slightly and increases in intensity until it becomes unbearable." "Will you be kind enough to give this your attention, and let me know to-morrow the slightest indication of the locality from which it starts?"

The following day he came by appointment, and said he had discovered the pain to begin in the left cheek. This is all I had to go by. The small gold filling on the buccal surface of the first left molar attracted my attention. With the idea that it might be deeper than it looked, I took it out; the cavity was not at all sensitive. I again tapped the tooth; no sensitiveness. I was attracted by the shining appearance of the cavity and the hardness of the tooth bone, also that some of the other teeth had small portions of their edges

broken off, which indicated high crystallization of the tooth bone. I began to suspect that the fine nerves of the tooth and teeth might be pinched by the rapid ossification of the serum that nourish them. Accordingly, I began to drill in the cavity in the direction of the pulp, and asked my patient to let me know at the slightest indication of sensitiveness. I soon got into the pulp cavity, and found it a small peatl. I continued to drill in the palatine root: when about a quarter its length my patient said. I feel that. I went no further in that direction, and inserted a drop of paste on a broach and stopped it up. Then the buccal roots were drilled into; the nerve canal in both was solid bone, and but slightly sensitive near the apex. They were treated in the same manner, the cavity filled with gutta percha, and my patient dismissed to call the following day and report. The hour brought my patient, and he told me he had a most comfortable night, and not the slightest pain had been felt since he left my chair. The small but highly sensitive portion of the nerves of what had been left were now without life. roots and the cavity were filled, when I told my patient if he ever again suffered from neuralgia to come to me. promised and thanked me.

This was a clear case of nerve ossification, as it has been termed, but only partially correct; it is more correct to say the ossification or rapid crystallization of the serum that nourishes the bone; the nerves and pulp are nourished by the blood, else they would change into cartilage in too short a time. Why the pulp appears ossified is caused from an excess of serum (which is always thicker in aged persons, as in this case), enveloping the entire pulp and changing it into cartilage. This difficulty does not occur in young people, that is, the crystallization of the pulp by thick serum. Therefore it is well for the dentist to pay attention to age in hidden cases of neuralgia.—Dominion Journal.

Warm feet and a cool head insure good digestion. A Switzerland dentist recommends "a warm foot bath after the day's work is over, as it promotes the circulation and relaxes the nerves." The best time to indulge in this luxury is just before going to bed.



THE GUM-FOCUS SYSTEM OF DENTISTRY.

BY OLIVER MARTIN, L. D. S., OTTAWA, ONT.

It is difficult to surpass the atmospheric principle of inserting teeth, it has so many advantages over the clasp and spring system. Even in partial dentures, an atmospheric plate is superior for one tooth over the clasp plate, as no antagonisms exists between the clasps and the natural teeth. But to consider this system of inserting plates or teeth, as well as that with clasps, as the only method by which a denture can be successfully applied, is to believe we have arrived at the hub of perfection. I do not think man can ever arrive at a stand-still perfection; for these reasons, I propose to describe the gum-focus principle as something new and practical.

The bones of the superior and inferior maxillary are not very sensitive, and less so if you are not too hasty in informing your patient what you are going to do. Let us take, for example, an upper denture. First, it is not difficult to judge from the length of the roots of the natural teeth, the depth of hole that can be drilled opposite or in the position of the second molars, as they are further removed from the antrum; the next two holes are in the position of the cuspids. necessary to be careful, and not drill so deep as to interfere with the branch of the nerves that supply the jaw when much absorption has taken place, but in any case to drill a quarter of an inch is quite safe and of sufficient depth to retain the gold pin with firmness. About No. 10 gold wire will be found sufficiently strong. A coarse thread is cut a quarter of an inch (the depth of the hole) on the wire; the pin's full length is about three-quarters of an inch. This gives half an inch of projection, still the length of the pins must be judged according to the nature of the case if the teeth are long or In order to regain the natural expression, it must not be supposed that the drilling of four small holes with a sharp drill in the alveolar is a painful operation. When the position is ascertained, the drill is passed quickly through the soft tissue, which is the most sensitive. When the pins are screwed in the jaw bone, in nine days the bone is formed firmly around the pins. Why it is called the gum-focus principle: The thread on the gold pin taps the bone, no other tap is necessary; the holes should not be drilled before you are ready to insert the pin, that is, one hole is drilled and the pin is inserted, and so on for the four holes. A small cork is placed over the first pin as soon as it is in position, and the same with each pin. This protects the pin from being twisted by the antagonizing teeth, the gums from being wounded by the pins. When a denture is to be made on this principle, the impression is taken and the rim plate stamped in the ordinary way, before the pins are inserted. Although the impression can be taken with the pins in position, it may be an advantage to do so, as it marks the position of the pins accurately; but I prefer to take the impression before the pins are in position, as there is less danger in removing the impression, and there is no difficulty in getting the position of the pins through the plate when the rim plate is well fitted. From the form of the plate, as well as that of the cast, the position of the pins is ascertained, the holes are drilled through the plate and the plate placed in position in the Then the holes are drilled in the alveolar through those in the plate, and the pins screwed in as soon as each hole is drilled: the holes in the plate are a little larger than the pins, as they are to admit the tubes in which the pins are held. In a full denture of the upper jaw, as this example is made to represent, gum teeth are used, and the teeth are in The well known method of fastening section teeth on a gold plate is superior to lining single teeth, being much My method has been to rivet thin pieces of gold to the sections, cutting off the head of the pins; the gold backing, being thin, is turned into a loop at the plate end, allowing the backing to be long enough to do so. On the plate is also soldered thin pieces of gold; the end of the narrow strip of gold only is soldered to the plate, allowing the projecting part to be also turned into a loop. This holds the cement to the plate and teeth, which forms a strong com-The pink rubber makes the neatest cement, as it bination. finishes nicely, being of a better color than the red rubber. and as it is not used as the base of the plate, but as a cement, the work is very strong and clean. The tubes that are to be soldered in the holes of the plate, and are to admit the jaw

pins, are turned on a wire the size of the jaw pins. It is not necessary to solder the tube lengthways, as the spring the tube affords will be found convenient to bind on the pin. Back of the cuspids there is room for the tube, but not so with the position of the right and left molars. To overcome this difficulty, with a narrow corundum wheel grind a groove along the interior side of the section molars that will allow your tube to pass in position. The tube and pink rubber will supply the deficiency of porcelain. With the cast before you, with four iron wires in the same position fixed in the cast, the dentist will be enabled to adjust the plate and teeth to a nicety. When all has been done on the cast that is necessarv, a trial in the mouth is made to see if the teeth are in proper expression; being held in position by wax, any slight change is easily effected. To sum up the gum-focus process, four pins are screwed in the jaw bone, a plate is stamped, tubes are soldered to the plate that admit the pins. plate is but a rim enclosing the alveolar ridge. These teeth can be removed by the wearer and replaced with ease, as the tubes come in direct contact with the pins to place the teeth in their position. The combination of the four pins hold the teeth in place without a tight fit of the pins in the tubes, but merely a nice adaptation of the pins and tubes. The advantage of this system is the perfect use that can be made of ar tificial teeth without dislodging them, the freedom of the palate, the power of inserting teeth in any difficulty-formed mouth. Nicely adapted caps of vulcanized rubber can be made to fit over the pins and given to the patient in connection with the teeth, and instructed to place these caps over pins when the teeth are taken out. The advantage of placing a single tooth by this method will be apparent to every dentist, as well as any number of teeth, or partial denture. When the ridge plate is made of rubber, the tubes are held by the vulcanite. They are placed over the iron pins in the cast, and the gum packed around them, as well as the teeth. The only particular point is to have the pins in the cast in exact position with those in the jaw. When Japanese can split the alveolar ridge and insert pieces of pearl, surely a small hole can be drilled with a sharp drill without much inconvenience. - Dominion Dental Journal.

TOO MANY DENTISTS?

It is but natural that a profession which deals with the most prevalent disease of the age, should attract the attention of young men in search of an opening for business. In some way it has become a popular superstition, that while dentistry is a hybrid branch of medicine, it is more easily attained and more lucrative. It would need more than an earthquake to upset any long-standing superstition, and dentistry will, no doubt, continue to attract young men, especially a large number whose chief ambition in life is to sail into its deep waters, even before they have learned how to navigate them. Medicine, in spite of its higher qualifications, is in precisely the same condition, and there are always a class of men in search of second-rate curriculums, secondrate examinations, and low fees. It is not the best education this class desire, but the easiest entrance. Yet, medicine has had a better process of selection, and has better excluded those who are comparatively ignorant of a classical, much less a common school education. Dentistry, for a long time, opened its arms to any man, even if he knew nothing of "the three Rs." Consequently, there are too many dentists of this class, if dentistry is to be looked upon as one of the learned professions. The hope of our profession is a higher standard of matriculation. It is perfectly safe to run any chance of the result of excluding from dentistry any man who has not education enough to pass a classical and mathematical preliminary.—Editorial in Dominion Journal.

THE USE OF COCAINE AS AN ANÆSTHETIC IN SURGERY.

BY DR. P. RECLUS.

Dr. P. Reclus in a lecture in the hospital de la Pitie formulated the technique of subcutaneous injections of cocaine in surgery. He said that the injections are perfectly safe, and that accidents are only due to ignorance and carelessness.

. As regards the strength of the solution, he severely criticised the use of strong solutions, limiting the strength to

two per cent., preferring one per cent. in more extensive operations, in which ten to fifteen injections are necessary to anæsthetize the region.

By keeping the patient in a horizontal position, the danger of syncope is avoided. A small quantity of alcoholic drink or coffee administered during the operation will keep up the strength of the patient. When the surgical operation is simple, as for instance the extirpation of a subcutaneous tumor, a sebaceous cyst of lipoma, Dr. Reclus, after having determined the place of the incision and its extent, thrusts the hypodermic needle through the thickness of the derma, pulling it back as soon as it has reached the cellular tissue. Then the rod of the piston of the syringe is pushed down until a slight white swelling becomes apparent on the skin. No more pain than that caused by the puncture should be inflicted on the patient, if the procedure is carried out properly.

While the needle is thrust through the dense tissue of the derma, the solution should be injected slowly. In the eyelids and in the prepuce, where the derma is so thin that the needle cannot be retained, it does not matter much whether the infiltration of the tissues with the cocaine takes place rapidly.

If the needle is too short to cover the whole area of the intended incision, the syringe is refilled and passed along a second line, the exact continuation of the first. When the injection is to be made in certain tissues, such as the lip, the tongue, the cervix uteri, the anal region, into certain angiomata, it is best to force down the needle as far as it will go, and practice retrograde injection, the piston being pushed down while the needle is being drawn back.

When the injection is completed, a few minutes should elapse before beginning the operation—three to four minutes when the solution is of two per cent. strength; five to six minutes when it is one per cent. This time can be employed in shaving the region, and cleansing it aseptically. The knife must be made to follow exactly the line of the needle, so as to remain in the middle of the anæsthetized track, and for that reason the assistants should not be allowed to pull on the tissues or on the skin, thereby disturbing the direc-

tion of the line. It may be useful to trace beforehand the line of incision with a little tincture of iodine.

A great many examples of the utility of local auæsthesia in major as well as minor operations can be given—the radical cure of inguinal hernia, the radical cure of hydrocele. castration, amputation of a phalanx, anal dilatation, etc. Every surgeon has his own method of inducing cocaine anæsthesia, which should be adapted to the particular operative procedure. In the operation for the radical cure of inguinal hernia, Dr. Reclus produces anæsthesia of the skin by means of three to four injections of one per cent. solu-The integuments are divided down to the aponeurosis of the oblique muscle. After examining the external ring and the hernial sac, he introduces the hypodermic needle under the aponeurosis of the muscles, and anæsthetizes this second layer; then he divides it up to the internal ring. The sac is next seized and dissected out, carefully avoiding injury to the vessels of the cord and the vas deferens: if adhesions render the dissection painful, a little additional cocaine will be useful. After complete dissection of the sac, one or two injections are made into it, after which it is opened, and reduction is performed. The operation is completed as usual. As a rule the suturing of the skin causes no pain, even though a half hour has elapsed since the first injection. Dr. Reclus never found it necessary to anæsthetize again towards the end of the operation, even when complications made it of one hour's duration.

The radical cure of hydrocele presents some common features with that of hernia. The line of incision is anæsthetized, three centigrammes of cocaine being usually sufficient for this purpose. The fibrous tunic is divided without injection, then the serous one is carefully dissected out up to the posterior part toward the place of insertion of the epididymus. The sac is punctured and emptied, and the tunica vaginalis resected, enough of it being left to constitute a new serous membrane. The lips of the two cut margins are brought together by a few silk stitches; others, following Von Bergman, extirpate the whole tunica vaginalis. The testicle is pushed back in the scrotum, the few bleeding vessels are tied, and the wound closed by sutures.

The technique of castration under cocaine anæsthesia, is also simple. The line of injection has the form of a battledore, commencing at the external ring and extending around the scrotum to its posterior part, returning to the inguinal opening.

The analgesic track should be well marked on account of the mobility of the skin. The testis is dissected out carefully, and the cord at the level of the external ring is injected with one syringeful of one per cent. cocaine solution. A few millimetres below the puncture, the cord is ligated and divided; no pain resulting from this operation. The presence of venous plexuses requires some caution to avoid introducing cocaine into the vessels.

Anal dilatation is a more complicated operation, for it is necessary here to anæsthetize the mucous membrane and the sphincter. Dr. Reclus first introduces into the anus a tampon of absorbent cotton soaked in a solution two per cent. of cocaine. Six punctures are made with the needle around the sphincter, the needle being inserted deeply and the injection made while it is being drawn back. The solution used is one per cent. Three or four minutes later, an anal speculum can be inserted without provoking any real suffering.

Amputations of fingers and toes, etc., can be performed easily under cocaine. Here after anæsthetizing the skin along the line of incision, if the bone has to be divided, an injection is made between it and the periosteum. Reclus performed a painless amputation of the forearm under local anæsthesia, the dose of cocaine not exceeding fifteen centigrammes of a one per cent. solution. The skin was anæsthetized along the line of incision; an injection was then made in front and behind in the muscles, one in each of the three principal nerves laid bare, finally one under the periosteum of the radius and ulna. The use of cocaine in place of chloroform was necessitated by the age of the patient, eighty-three years, joined to a profound cachexia due to suppuration.

Cocaine should not be substituted for chloroform in extensive surgical procedures, and especially when the limits of the operation are not exactly known in advance. In some cases the anæsthesia was initiated with cocaine, but the pres-

ence of complication, such as adhesions, required the use of chloroform. In such cases a few drops of chloroform were sufficient to complete the anæsthesia.—Semaine Medicale.

DIFFUSE CELLULITIS OF THE NECK DUE TO CARIOUS TEETH.—An interesting case of diffuse cellulitis of the neck, apparently of dental origin, recently occurred at St. Mary's hospital. The patient, when examined, was found to have two or three carious teeth in the lower jaw, one of which especially had given him trouble for about a month, the cheek being swollen on the same side. Four days before he was admitted he had been seen by a doctor and advised to "come in" that same day, as his neck was then much swollen and he had difficulty in swallowing, and his voice was husky. On the day of going into the hospital he could only speak in a whisper, had been unable to swallow any solid food for about four days, was very weak and had difficulty in breathing. His neck was greatly swollen all round, especially on the right side, where the carious tooth was. His temperature was 101.8. He complained of considerable pain, and could scarcely open his mouth at all. Ether was administered during which he expired. The post-mortem showed that there were signs of old chronic periostitis at the root of one of the lower molars on right side, and an abscess containing about 3 i. of pus extending down from the jaw into the cellular tissue of the neck. There was a deep seated cellulitis involving the cellular tissue right down to the trachea.-Iou. Brit. D. Asso.

Younger (W. J.) On an Operation to Prevent Facial Deformity that Attends a Fistulous Opening, Through the Cheek, from an Alveolar Abscess.—The tooth was a left inferior molar. As a preliminary operation the abscess was tapped through the roots by widening the canals, and the abscess thoroughly cleansed, first by injections of warm water, and then by a 2-1000 solution of bichlorid of mercury. These liquids were then forced in the same rotation through the fistula in the cheek, from inside out, after which the whole of the diseased surfaces were treated to an injection of Churchill's solution of iodin. This was repeated

three times, in as many different days, by which time active suppuration had ceased and the surface of the fistula in the cheek presented a healthy granulated appearance. incision was then made between the cheek and the jaw. cutting down not only through the fistula, but an eighth of an inch beyond, in front and below the margin of the indurated ring that is so characteristic of this lesion. little necrosed surface of bone was discovered, which was promptly scraped away. After thoroughly washing the wound with a warmed 1-1000 solution of the sublimate, a slightly wedge-shaped layer of cotton-in appearance like the side or flap of a saddle-saturated with wax was introduced between the cut surfaces and retained to the teeth by ligatures. Thus these surfaces were kept apart and forced to heal, each one independently of the other, and the cheek allowed to resume the rounded appearance it had before the disease had perforated it. You may ask why the roots of the tooth were not extracted. The answer is, because their retention was necessary to prevent a serious gap in the jaw, which could not have failed to produce a depression in the Besides, the roots treated and cured, and external cheek. the surrounding diseased structures restored to health, an important, good, and serviceable tooth would be restored to usefulness.—Cosmos.

ROBERTSON (W. A.) ON GOLD ATTACHMENTS IN CASES OF CLOSE BITE.—Having obtained a correct impression and bite, we select a plate tooth to correspond with the natural ones remaining, and grind it to fit closely to the gum. When this has been done, attach the tooth by a little wax to hold it in position, and varnish and oil the labial portion of the cast around the tooth and run a little soft plaster over it, sufficiently to just cover the cutting edge. When hard remove the wax and investment, and back up the tooth in the ordinary way. We have found the use of a little card board very convenient in shaping the backing. Press the pins through it and trim with a pair of scissors to the size the backing is to be, and by using this as a pattern, it is easy to cut the backing and punch the holes. When this is done, place the tooth back in the investment, and set back

on the cast to see that the backing does not interfere with its going to place. If it is all right, cut a strip of gold plate (No. 30 is strong enough) about the same width for single teeth as the backing, and about one-half inch in length. Punch a few holes in this and bind to conform approximately to the roof of the mouth on the cast; lay it in place and close the bite to be sure it is right. Fasten to the backing with a little sticky wax, and remove from cast and invest in plaster and sand, equal parts, and solder. the work has been carefully done, the soldered piece will go right to place, and the waxing up may be proceeded with. It is well to finish up the solder, etc., before waxing, as it is more troublesome to do when the plate is completed. When there are two or more teeth, we generally use the gold extension a little wider than for single teeth, attaching it midway between the two. This will be strong enough, and saves time. In packing the rubber, draw out a small piece and then work it carefully under the gold extension, so as to insure its perfect imbedding in the rubber.—Dominion Journal.

EXTRACT FROM A DISCUSSION ON ANCHORAGE OF GOLD FILLINGS.—Dr. Darby always felt a little sad when men whom he had learned to respect and hold in his professional esteem recommended such practice as to use sticking plasters to hold their fillings in place. It is not good mechanics, it is not good sense, and he did not believe it to be good prac-Old practitioners should use great care in advocating such things, in place of the more reasonable practice of making the cavities of a retentive form, and then thoroughly consolidating the material into them. We are led into bad practice by these means. Some years ago there was a craze for copper amalgam. Some of us were a little doubtful concerning it until Dr. Miller pronounced in favor of it, and then we thought we were entirely safe in following in the footsteps of so eminent a man. Now we can see that scarcely anything has done so much harm in dental practice as copper amalgam. A great many teeth and some dentists have been ruined by it.

Our young men are are always looking for some patent

method of easy practice, and some of our older practitioners keep their eyes peeled for short cuts to excellence. There is but one road to success, and that is patient, painstaking effort. There are more patent suckers for holding artificial plates in the mouth than a man can reckon up without taking a great deal of time to it, but who ever heard of a reputation for good work being won by means of them? If a plate is without adaptation, all the gimerack stickers that were ever peddled out by men too lazy to earn a reputable living will not make it what it should be, and it is the same with fillings.—Practitioner and Advertiser.

The causation of pyorrhoea alveolaris is probably the action of germs upon tissues whose vitality is lowered either by local or some constitutional disease. Thus accumulation of tartar, slight gingivitis, injuries of the gum, etc., were cited as local predisposing causes, while struma, gout, syphilis, rheumatism and wasting diseases act as constitutional predisposing causes, at the same time are present in abundance in the pockets between the gums and teeth.—Dr. Roughton.

DEATHS UNDER ANÆSTHETICS.—Gurlt (Rathgeber für Gesunde und Kranke, November 19, 1892,) reported to the last Surgical Congress at Berlin the following statistics of deaths under anæsthetics. They are made up from the observations of 62 operators, who anæsthetized 109,196 persons, with 39 fatal results, showing 1 death to 2,800 narcoses. The following were the anæsthetics used:

In 2,913 cases the narcosis lasted over an hour; in an operation for utero-vaginal fistula, $4\frac{1}{2}$ hours; in a case of tetanus, 9 hours. In 25 cases, of which post-mortem examinations were made, cardiac diseases were found. The author urges careful examination of the heart before administering chloroform.

Southern Dental Lournal

A MONTHLY PUBLICATION

DEVOTED TO THE INTEREST OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. Johnson, 806 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to BOUTHERN DENTAL JOURNAL., 27 E. Hunter St., Atlanta, Ga.

Editorial.

HINTS TO YOUNG GRADUATES.

About the first of March, as is usual, there were a vast number of candidates for public favor scattered broadcast upon the troubled and turbulent waters of a professional sea. Some will succeed rise to distinction—make a name and fame and become the leaders of men; others will succeed but partially, and others still will fail completely, become disgusted with their chosen profession and go at something better suited to their talents. If a few, why should not all succeed? In the course of human events—in the past history of nations—in the growth of the animal and vegetable kingdoms, there is a stronger and a weaker and the strong have always risen above and oppressed the weak. There has been a time in the distant past when muscle and animal strength gained for men fame and distinction over brain power. That time is forever past. In this great struggle for popularity and supremacy over others of like mind and purpose, muscle counts less than all other acquirements, the strength lying in the mind, character, will, perseverance and determination. It is just as easy to be successful as it is to stumble along barely making a subsistence. Success lies within easy reach of every individual who is sufficiently desirous of it to make the proper effort to obtain it. This effort must be continous

and without any abating. Character, will and determination taken collectively are a strong combination that have often been known to down the strongest minds, in this great battle of life. Take a survey of the field, glance upward at the dizzy heights of fame, select some point, better too high than too low, and determine to reach it, and never be satisfied with anything less. It may take the better part of your life; it may require you to work while others have idle moments of enjoyment, but self-denial is one of the great requirements, and you will appreciate it more when your object is gained. Patient toil with a fixed and steady purpose must and will succeed in the end.

Never get it fixed in your mind that you have learned enough, but absorb knowledge from every source that it may be gained.

LABOR.

Life to some is drudgery; to some, pain; to others, pleasure; but to all, work. Let none feel a sense of sore disappointment that life to them becomes routine. It is a necessary consequence of our nature that our work and our pleasures, should tend to become routine. The same wants, the same demands, and similar duties meet us on the threshold of everyday. We look forward to some great occasion on which to give proof of a heroic spirit, and complain of the petty routine of daily life. On the contrary, it is this succession of little duties, little works apparently of no account, which constitute the grand work of life; and we display true nobility when we cheerfully take these up and go forward, content to "Labor and to wait."

It is not my intention to make a habit of apologizing for short comings in the Journal, if there should ever chance to be any, but on account of a sad bereavement in the last month, my mind has been somewhat diverted from my labors and I have been incapacitated for much mental work. This issue of the Journal has probably suffered some thereby, but I promise to make it up in the future.

I have much to be thankful for since again assuming journalistic control. Letters of congratulation and encourage-

ment have come in from every source. It is exceedingly gratifying to know that ones "labors of love" are noted and appreciated. Kind friends your words are not lost, the SOUTHERN DENTAL JOURNAL is growing every day and will yet be a publication of which you will be proud.

"If an amalgam filling is half in place and it gets wet, will it be possible to so dry it that more amalgam can be added so it will adhere to the wetted surface?"—Dental Review.

Is it possible! Or do we understand the question.

The Alabama State Dental Society meets at the Caldwell Hotel, Birmingham, April 11th to 14th. Don't forget the date.

The Georgia State Dental Society meets in Atlanta May 9th to 12th. Every member should be present. This is an important meeting and all should and be there at the opening. Do not come in at the eleventh hour. The State Examining Board meets may the 8th at same place.

The Georgia State Examining Board meets in Atlanta May the 8th. The law is now very explicit as to illegal practice of dentistry in this State.

"Any person commencing the practice of dentistry from and after the passage of this act (approved October 9th, 1885,) shall be deemed guilty of a misdemeanor, unless said person shall have obtained a license from a Board of Examiners duly authorized to grant said license. There are no exceptions.

SPECIAL ACT 1891.

Every non-resident dentist practicing in this State shall pay a special tax of ten dollars (\$10) in every county in which said dentist may practice.

Dr. Joseph Head, Assistant Editor of the *International Dental Journal* has resigned and Dr. George W. Warren will fill the vacancy.

In soldering tubes or nuts to receive screws to their attachments, chuck the end or your lead pencil in the holes and the solder will be kept out.—Western Dental Journal.

Correspondence.

JACKSON, MISS., April 5th, 1893.

Dr. H. H. Johnson, Editor Southern Dental Journal:

DEAR SIR.—As Secretary of the Mississippi State Deutal Society, it is my pleasant duty to inform pout hat at a session held this morning the Southern Dental Journal was made the official organ of the Society—with the disclaimer (to be published in proper place), that "in selecting the Southern Dental Journal as the official organ of the Society, that body does not in any sense indorse any views which may be advanced in the pages of the Journal outside of the proceedings of the Society."

You are also requested, if possible, to issue the proceedings in a single issue, to contain the minutes, papers, discussions, resolutions, selections etc., as furnished by the reporter for the Association.

Yours truly and fraternally,

W. E. WALKER, Rec. Sec.

The above action of the Mississippi Society is very gratifying and encouraging. The JOURNAL has before been the organ of the Society and we are glad to see it restored again. All of our obligatious and promises to this grand body of good men will be faithfully observed.—[EDITOR.

COLUMBIAN LETTERS.

FROM C. O. LUMBUS.

Editor Southern Dental Journal:

I am glad, indeed, to see that you are calling the attention of the profession to the meeting of the Columbian Congress; one of the main reasons for my writing these letters is to draw attention to this meeting, which is to be held durthe World's Fair at Chicago, commencing Monday the 14th day of August and embracing all of that week, which will be a feast of good things. From time to time we can tell of the many things of interest to be seen and taught at this Dental Congress. The Executive Committee had another

important meeting the 27th and 28th of January at Chicago to finish up as far as they could the work that has been assigned them in organizing and getting under headway this great meeting. Many will never realize the work that has been done by these men, who have so unselfishly devoted their time and substance to create and put in motion the "World's Dental Congress."

No little credit is due to Drs. W. W. Walker and A. O. Hunt, the chairman and secretary for the committee, for their laborious services, which they have given so cheerfully to bring success to the undertaking, which will confer honor upon our beloved profession, and every dentist who takes a part in it, and those who do participate will be proud of their membership. Now some of the Journals are printing the claims of "Jersy" and publishing testimonials to secure the honor of originating the idea of this Dental Congress. for the New Jersey Dental Society, New Jersey is a great State, and produces as fine dentists as you find in the United . States, and they generally "get there Eli"—as well as a fine crop of mosquitoes, who do the same. But she is not entitled to this honor of originating this Congress; for the writer has a letter from Dr. Harlen, of Chicago, who advised him as well as others, including himself, not to accept places of honor on committees of the International Medical Congress' Dental Section that met in Washington in 1887. He wrote as far back as the early part of 1886, stating that the Medical-Dental Section would not be a true representative of dentists, and we would soon try and have a real Dental Congress, composed entirely of dentists. dentists refused to occupy the places of honor assigned them, but did afterwards lend their aid and presence to make the Dental Section a success, which assuredly was the most successful one, of that International Congress. A good deal was written about it in the first numbers of the Dental Review about that time, in 1886. The official promulgation of this Dental Congress was first brought to light at Atlanta, Ga, July 1890, and agreed to by the American Association at Excelsor Springs, Missouri, in August of the same year; organized and sent forth on its great mission to report its great work August 14th, 1893, at Chicago, to which the

dentists of the world are invited to participate. What better advice could I give to the young men who are now coming into the ranks of the profession, from the various colleges all over our land, than to be certain to avail themselves of the benefits of this Congress, which even to those who are just learning, will be a post-graduating course, as well as to some of the old practitioners who are rusty and need very much a brushing up.

The time is passing away when we can hide our ignorance from an intelligent and deserving public, they soon catch on and can quickly tell the worthy and true from the loudmouthed charlatan. The man who expects to march in the processsion will have to be up early and avail himself of all the opportunities that cross his pathway, to maintain and hold his practice after years of study and dilligence in secur-I well remember a circumstance that occurred in my early practice, and even at this late day in life, makes me smile when I think of it, how I got away with an inquisitive and talkative patient, that I would not dare to attempt it. upon to-day. I had been practicing some five or six months, I suppose, and I was sitting one day in my office thinking of an old motto, "Labor and wait," and thought I was doing more waiting than labor, when an old maid, of about forty years, who was head man and quartermaster-general of her father's whole family, called to engage my services to "fix the teeth" of the whole family. They were plain, clever and kind people, in good circumstances, which promised me some labor and good pay, and we agreed upon terms. I soon saw prided herself upon being intelligent, well read and had traveled somewhat, and was not backward in letting you know that she was no small potato and could spell culture with a big C. She was soon interested in my family affairs, wanted to know my genealogy for several generations back, aud asked questions that were tedious, tiresome When I commenced to operate for her she and tasteless. wanted to know the use of each instrument, and "what for" it was used, the history of the different materials, etc. had prepared some cavities which I was going to fill with When she renewed her questions by asking me over separately and individually the various ways of prepar-

ing the cavities and how I would fill them and the different ways of nsing the instruments that would have utterly confused a three-years course student, who had all his answers put in a quiz room. She had worked me up to a point that I just wanted to "fix her," which I did thusly: Madam, these are compound oval cavities, made in the posterior distal part or portions of the superior upper molars; which I will fill with metalic fillings consisting of gold, silver and platinum, which I think after being well manipulated and - amalgamated will be a suitable filling for the case. was a mild stand off, and she waited some time before saying any thing, and I thought I had her silenced, but when I poured out the amalgam into my hand, and began to add the mercury. She spoke up very quickly and said, looks just like quicksilver and the white of an egg, mixed together to kill bed bugs. If it is not that what is it?"

That was a stunner, and my patience was about exhausted. Nothing but ignorance and youth was equal to this emergency. I stopped and very deliberately looking her in the face, assuming the most dignified and professional manner I could said, "Madam, that is Hydrargyrum cum creta, which causes the amalgamation of the metalic fillings." I saw that she realized that it was time for the doxology, for she would not show her ignorance by asking, "What was that?" Not being at the head of a baby farm she did not know what was chalk mercury. She never asked another question, and right there I am fully persuaded, that I impressed her with my professional knowledge, that gained her confidence and good will. She soon married and is now at the head of a family of her own, and I have held her friendship and patronage until this day. I find that as a general rule it is hard to convince young men just entering the profession, that the older men take or feel an interest in them. A great many are so conceited and have a notion that they know it all, have had so many more advantages than some of those old "Fogys that they do not care to receive or think they need any advice from them. So it's seldom that we see that sympathy or social relations, or even professional regard among dentists that we do in the other professsions.

Of this we will not write now, but perhaps may later, but

I take the position and believe that I will be upheld by the greater majority of observing men, that the young man just leaving college that immediately allies himself with Dental societies and goes to work in them and for them, with all his might, is the successful man of to-day. He may not be as brilliant or have taken any college prizes, but if he will do his part, stick to his office, live and be the true professional gentleman that he should be, he will steadily climb to the top of the ladder; while these "smart Alecks" who can't learn anything from Dental Societies and never attend them, will in a few years fall far behind them, and you will frequently see them have signs, "Dental Parlors," "Palace Dental Rooms," painted in large letters that can be seen at a great distance, and that juggling in various ways to secure a practice that will not come to such men and methods. noticed the course of many young men during my professional life, some that my heart went out to, and I hoped that I would see them achieve all of their desires, fail right on these lines. Some whom I have known that left college with the highest prizes and stood brilliant examinations before State Examining Boards, that have never darkened the doors of a Dental Association since they left college years ago; They have come, they are going, and some have gone! Ignoble failures!!

Our State meetings will soon come all over our Sunny Southland. How glad I would be to see the last young Dentist, as well as some of the older ones, that have enjoyed the benefits, high standing and position of to-day that the profession receives, which has been achieved by a board of faithful men who have so faithfully stood at the post of duty during these many years to secure it, come up and join us. Fall into line in the various State meetings, and prepare themselves to take our places, for it will not be a great while before the places that now know us shall know us no more forever!

COLUMBUS, GA., April 1893.

At a meeting of the Joint Committee of the Chicago Medical Profession on World's Fair entertainment, held at the Sherman House, November, 1892, the establishment of a

Bureau of Information and Service was delegated with approval and endorsement to Chas. Traux, Green & Co., the Committee reserving to itself the duty of such social entertainment of visiting physicians during the continuance of the Exposition as may seem desirable.

This action was confirmed at the final meeting of the Joint Committee, Feb., 25th, 1893, and on application of the Practitioners' Club, and the South Side Medical Club, the matter of Social entertainment was delegated to them, with full authority to act in the capacity of entertaining bodies, with the retention of the chairman and its American and Foreign secretaries already appointed.

Chairman - Dr. Chas. Warrington Earle.

American Secretaries.—Dr. Archibald Church, Dr. Geo. Henry Cleveland, Dr. John C. Cook and Dr. J. C. Culbertson.

British Secretary.—Dr. Sanger Brown.

German Secretary.—Dr. F. C. Hotz.

French Secretary.—Dr. Fernand Henrotin.

Spanish Secretary.—Dr. E. J. Gardiner.

Italian Secretary.—Dr. A. Lagario.

Swedish Secretary.—Dr. K. Sandberg.

Canadian Secretary.—Dr. R. D. McArthur.

Russian Secretary,———.

The scope and duties of the above secretaries will be designated in the future.

C. WARRINGTON EARLE, Chairman.

COMMITTEE ON EXHIBITS WORLD'S COLUMBIAN DENTAL CONGRESS.

The Committee on Exhibits for the World's Columbian Dental Congress desires to obtain rare specimens of growths, abnormalities, casts, illustrations and methods, instruments and appliances, both ancient and modern, whereby the growth of the profession may be shown from its early infancy up to the present time. They also desire to exhibit an ideal library, operating room and laboratory; and to this end, earnestly request all members of the profession, together with dental dealers and publishers, to loan them any

specimens, instruments, appliances, books, photographs or pictures of Societies and eminent men, of all countries, together with anything and everything that will be of interest to any dentist from any part of the world. They will pay all transportation charges on such exhibits to Chicago and return, and will insure the same, while on exhibit, if desired.

COMMITTEE:

Chas. P. Pruyn, Chairman, 70 Dearborn St., Chicago, Ill. Arthur E. Matteson, 3700 Cottage Grove Avenue, Chicago, Ill.

E. M. S. Fernandes, 36, Washington, St., Chicago, Ill.

M. L. Rhein, 104 E. Fifty-eighth St., New York.

A. W. McCandless, 1001 Masonic Temple, Chicago, Ill.

R. C. Young, Anniston, Alabama.

James Chace, Ocala, Florida.

W. A. Campbell, Gold and Fulton Sts., Brooklyn, N. Y. Address all communications to

Dr. A. W. McCandless, Sec'y, 1001 Masonic Temple, Chicago, Ill.

Dr. S. B. Barfield, Macon Ga.

DEAR SIR:—Your letter of warning is a very good one; and Mr. J. L. Layman, it seems, is quite an inventive genius of names. I had him to fix up some old burs for me, which was done nicely, and, like you, was pleased and offered him other work to do. He claimed to be an expert bridge and crown workman, and I am always willing to to learn. I put him to work on a single bicuspid crown, 22 karat gold. He made a failure. I then gave him a 24 karat piece of gold with which he made auother failure, and that night skipped out, "between the suns," leaving me a six dollar board bill to pay, which I cheerfully did, feeling "sold out."

He is a deaf mute, claims to be a geologist, and writes several languages. His name here was C. L. Cay. Said he was the son of Cay, the instrument maker for the S. S. White Dental Manufacturing Co. Yours truly, Tuscumbia, Ala., March 23d. G. Chisholm.

The above was handed me by Dr. Barfield and explains itself. The letter of warning referred to appeared in the March issue of this journal and was relative to traveling bur sharpener, who fleeced Dr. Barfield out of several dozen fine cut burs. Look out for him.—Editor.]

Book Reviews.

Elements of Chemistry and Dental Materia Medica, by J. S. Cassidy, D. D.S., M. D., Professor of Chemistry and Materia Medica, in Ohio College of Dental Surgery, Cincinnati. Robert Clark & Co. 1893. Bound in cloth, price \$2.50.

Dr. Cassidy, so long and favorably known as Professor of Chemistry and Materia Medica, in the Ohio College of Dental Surgery, needs no introduction to the profession, nor anything he might write. In this excellent work he has departed from a beaten path and introduced new and novel features, especially adapting it to the needs of dental students for whose assistance it was especially written. As all progressive dentists are students, it may be said to be invaluable to all alike. Dr. Cassidy has divided his work into three parts. Thefirst and second treats on Inorganic Chemistry and Materia Medica; the third on Organic Chemistry and Materia Medica.

The authors says: "It may appear on first sight, that our Materia Medica is too limited and overshadowed by the governing science of chemistry, but the combination of these two branches of our curriculums, as herein presented, which I believe is unique, and to the advantage of the student—necessarily prevents the complete exposition of at least those drugs which are unessential in dental practice." It is a good work filled with a lot of nice gems of thought and we gladly recommend it.

Lippincott's Magazine for April, 1893.—Contents:—Columbus in Love, (Illustrated) George Alfred Townsend; What the Publicity Deportment did for Columbian Exposition, (Portrait of Major M. P. Handy) William Igleheart; Coumbus (Poem) Robert Loveman; Abraham's Mother, (Illustrated) (Lippincott's Notable Stories; Annie Flint; A Description of the Inexpressible, Julian Hawthorne; Sappho, Edgar Saltus; April's Afield, (Poem) Owen Wistar; The Religion of 1492, Frederic M. Bird; Tennyson, (Poem) Florence Earle Coates; Men of the Day, M. Crofton; With the Wits, (Illustrated by Leading Artists.)

A Pocket Memorandum Book with the compliments of the Atlanta Branch House, of the S. S. White Dental M'f'g. Co. This is a neatly gotten up little book with a card case and calendar attached. Vest pocket size and very convenient.

Societies.

Commencements.

BALTIMORE COLLEGE OF DENTAL SURGERY.

The fifty-third annual commencement exercises of the Baltimore College of Dental Surgery will be held at Ford's Opera House, Monday afternoon, March 20th, 1893. at 2 o'clock.

CLASS OFFICERS.

President, Milton S. Merchant, Texas. Vice-President, Harry C. Griffith, Maryland. Secretary, Joseph Krainik, Koumania. Treasurer, Andrew W. Soule. Vermont.

EXECUTIVE COMMITTEE.

Chairman, Edward S. Rinehart, Texas; Robert F. Taylor, Canada; John Wood, New York; Frank W. Shegogue, M. D. Robert E. Harrison, Pennsylvania.

PROGRAMME.

Orchestra under the direction of Prof. L. H. Fisher. Overture, "Cinderella," Rossini. Selection, "Hood," DeKoven. Waltz, "La Source," Waldteufel. Selection, "Robin

Prayer, Rev. Felix R. Hill.

Intermezzo, "Cavolliera Rusticana," Mascagno.

Announcements of Graduates-Prof. R. B. Winder. Dean.

Selection, "Lion Tamer," Fisher. Conferring of Degrees—The Dean.

Comic, "Pastimes on the Pier."Turner.

Conferring of Class Honors, Prof. M. W. Foster-Diamond medal, Milton S. Merchant, grading 59 out of a possible 60. Gold medal, G. A. Hahn and Luther M. Parsons, respectively 541.

Honorable mention, W. H. Gregg, 54: Francis H. Mulholland, 531; Erwin S. Rinehart, 53; Joseph Krainik, 521

Medley. "Gems of '92," Fisher.

Awarding of Prizes, Dr. Fred A. Levy, President Board of Visitors.—Operative prize, Joseph Krainik; very honorable mention, J. W. Thompson. Mechanical prize, Joseph Krainik. Bridge work Prize, Harry C. Griffith. Essay on Orthodontia, Harry C. Griffith.

Intermezzo, "Ball Whispers." Gregh.

The Annual Oration, Rev. H. Allen Tupper Jr., D. D. Xylophone, Selected, by Marshall.

Valedictory, Robert F. Taylor.

Piece Fautare, "Emperors Body Guard" Friedman.

Benediction.

March, "Flirtation," Sousa.

Prizes Given.—First Honors, by Faculty; Second Honors, by James Hart, Operative, by S. S. White Dental Manufacturing Co, Mechanical, by Snowden & Cowman. Bridge work, S. S. White Dental Manufacturing Co. Essay prize, by Dr. J. N. Farrar, New York.

CLASS OF 1893, BALTIMORE COLLGE OF DENTAL SURGERY,

W. H. Gregg, Pennsylvania; Harry C. Griffith, Maryland; G. A. Hahn, Germany; R. Edward Harbison, Pensylvania; Chas. S. Hoose, New York; Claire G. Hamilton, Vermont; Albert C. Hays, New York; Fred Dwight Joy, New York; Joseph Krainik, Roumania; Charles A. Krantz, Maryland; Milton S. Merchant, Texas; Francis S. Mulholland, Wisconsin; Luther M. Parsons, Maryland; Erwin S. Rinehart, Texas; Andrew W. Soule, Vermont; Frank W. Shegogue, Maryland; John W. Thompson, North Carolina. R. Franklin Taylor, Canada; B. F. Wendell, Pennsylvania; John Wood, New York.

Number of Matriculates for '93, 131.

UNIVERSITY OF MARYLAND.

The Annual Commencement of the Department of Dental Surgery, of the University of Maryland Faculty of Physic, will be held at the Academy of Music Thursday, March 16, 1893.

CLASS OPFICERS:

President, Fred. L. Arnold, R. I.; Vice-President, Samuel M. Byers, Penn.; Secretary, Norwood G. Carroll, N. C.; Treasurer, D. Fleming Sallis, Miss.

Executive Committee: J. Edwin Boozer, S. C., chairman; Henry Winter Davis, Va.; Samuel A. Boyd, Cal.; Roland E. Loucks, Canada; W. Lee Davis, Cal.

ORDER OF EXERCISES:

Music by Prof. Wm. F. Thiede's Orchestra.

Praver.

Music; Overture Le Chevalier Breton; A. Harman.

Reading of Mandamus by the Dean, Prof. Ferdinand J. S. Gorgas, M. D., D.D.S.

Music-Selection, "La Cigale," Otto Langey.

Conferring of Degrees, by Hon. S. Teackle Wallis, LL.D., Provost of the University.

Music—Manana, "Chilian Dance," J. Missud. Address to the Graduates, by Rev. E. L. Watson. Music-Waltz, Goldregen-Waldtenfel.

Award of Prizes.

Class Orator, C. Howard Nicholson, Canada.

Music-Grand Duchess Selection-Tobani.

Benediction.

Music-March, Flirtation-Sousa.

GRADUATES-CLASS OF 1893.

Fred Loveland Arnold, Rhode Island; S. DeLeon Avery, South Carolina; William H. Barr, Canada; J. Edwin Boozer, South Carolina; Samuel A. Boyd, California; Samuel M. Byers, Pennsylvania; Norwood G. Carroll, North Carolina; Henry Winter Davis, Virginia; William Lee Davis, California; William W. Farmer, Virginia; Roland E. Loucks, Canada; Willie E. Minghini, W. Virginia; C. Howard Nicholson, Canada; John S. Rees, California; Thomas R. Rowe, Rhode Island; D. Fleming Sallis, Mississippi—16.

The new rule requiring three instead of two sessions before graduation, has necessarily reduced the number of graduates this year. Last year the number was seventy-three.

Number of Matriculates for session 1892-93, 108.

OHIO COLLEGE OF DENTAL SURGERY.

The forty-seventh annual commencement of the Ohio College of Dental Surgery, department Dentistry, University of Cincinnati, was held at the Auditorium of the Young Men's Christian Association, Wednesday March 15th, 1893, at 8 o'clock, P. M.

PROGRAMME.

March—"High School Cadets," Sousa.

Overture—"Pegasus," Rollinson.

Prayer.

Conferring of Degrees and Address—D. W. Clancey, M. D., D. D. S., Vice-President of the Board of Trustees.

Selection-"Bohemian Girl," Balfe.

Awarding of Prizes—Prof. H. A. Smith, Dean of the Faculty.

Cornet Solo—"Mabel Waltz," Godfrey, Herman Bell-

stedt, Jr.

Address-Dr. Dudley W. Rhodes.

Spanish Serenade—"La Poloma," Gradier, Class Orator, Charles Leslie Casey, of Cambridge, Ohio.

Potpourrie of Melodies, Clauder.

GRADUATES.

Pearl Wilbur Applegate, Jesse Sydenham Bailey, Sharon King Bailey, Charles Leslie Casey, Richard Ambrasa Foley,

John Baptist Hayes, John Shepherd Hussey, Francis Allen Lush, Max Julius Hans Martin, Philip Martin Offutt, U. Clarence Purdum, David Este Sheehan, Jr., Victor Trager, James Calvin Van Kirk, Howard Austin Whiteside.

Number of Matriculates, 121. Number of Graduates,

15.

Section announcement of the first Pan-American Congress to be held at Washington, D. C., September 5th, 6th, 7th and 8th, 1893.

President, William Pepper, M. D., LL. D., 1811 Spruce

St., Philadelphia, Pa.

Secretary-General, Charles A. L. Reed, M. D., 311 Elm St., Cincinnati, O.

Treasurer, A. M. Owen, M. D., 507 Upper Front St., Evansville, Ind.

Chairman of Executive Committee, Dr. Henry D. Holton,

Brattleboro, Vt.

Committee of Arrangements: Sam'l S. Adams, M. D., Chairman, 1602 K St., Washington, D. C.; J. R. Wellington, M. D., Secretary, 1416 Fifteenth St., Washington, D. C.

SECTION ON ORAL AND DENTAL SURGERY.

Honorary Presidents: Dr. Jose Joaquin Aguirre, Santiago, Chile; Dr. R. R. Andrews, Boston; Dr. E. A. Baldwin, Chicago; Dr. George Beers, Montreal, Canada; Dr. S. B. Brown, Fort Wayne; Dr. Emegdio Carillo, City of Mexico, Mexico; Dr. Wm. Carr, New York; Dr. B. H. Catching, Atlanta; Dr. Geo. J. Freidrichs, New Orleans; Dr. Ricardo Gordon, Matanzas, Cuba; Dr. J. H. Hatch, San Francisco; Dr. A. O. Hunt, Iowa City; Dr. Louis Jack, Philadelphia; Dr. H. J. McKellops, St. Louis; Dr. Francis Peabody, Louisville; Dr. J. C. Storey, Dallas; Dr. J. Taft, Cincinnati; Dr. J. B. Willmont, Toronto, Canada.

Executive President, M. H. Fletcher, M. D., D. D. S., 65

W. 7th St., Cincinnati, O.

Secretaries: Dr. John S. Marshall (English speaking), Chicago, Illinois; Dr. Ramon Campuzano (Spanish speaking), Philadelphia, Pa.; Dr. N. Etchepareboard [Tacuari 355] Buenos Ares, Argentine Republic; Dr. Wilson, La Paz, Bolivia; Dr. Benicio de Sa, Rio de Janeiro, U. S. of Brazil; Dr. Luke Teskey, Toronto, Canada; Dr. Guillermo Vargas Paredes [Carrera 7, num. 638], Bogota, Republic of Columbia; Dr. J. Luis Estrada, Guatemala City, Guatemala; Dr. George Herbert, Wailuku Ma., Hawaii; Dr. Rafael Rico [Escuela de Med], City of Mexico, Mexico; Dr. A. Lacayo, Granada, Nicaragua; Dr. Andres G. Weber [Cor-

rales 1] Havana, Cuba; Dr. Angel Guerra, Montevideo, Uruguav.

EXTRACTS FROM REGULATIONS AND BY-LAWS.

Membership.—Members of the Congress shall consist of such members of the medical profession of the Western Hemisphere, including the West Indies and Hawaii, as shall comply with the special regulations regarding registration, or who shall render service to the Congress in the capacity of Foreign Officers. (General Regulation 2.)

Constituent Countries.—The following shall be considered as the constituent countries of the Pan-American Medical Congress: Argentine Republic, Bolivia, Brazil, British North America, British West Indies, (including B. Honduras), Chile, Dominican Republic, Honduras (Sp.), Mexico, Nicaragua, Paraguay, Peru, Salvador, Republic of Columbia, Republic of Costa Rica, Ecuador, Guatemala, Haiti, Kingdom of Hawaii, Spanish West Indies, United States, Uruguay, Venezuela, Danish, Dutch and French West Indies. (General Regulation 7.)

Sections.—The Sections of the Congress shall be as follows: (1) General Medicine, (2) General Surgery, (3) Military Medicine and Surgery, (4) Obstetrics, (5) Gynæcology and Abdominal Surgery, (6) Therapeutics, (7) Anatomy, (8) Physiology, (9) Diseases of Children, (10) Pathology, (11) Opthalmology, (12) Laryngology and Rhinology, (13) Otology, (14) Dermatology and Syphilography, (15) General Hygiene and Demography, (16) Marine Hygiene and Quarantine, (17) Orthopædic Surgery, (18) Disease of the Mind and Nervous System, (19) Oral and Dental Surgery, (20) Medical Pedagogics, (21) Medical Jurisprudence, (22) Railway Surgery. (General Regulation 8.)

Languages.—The languages of the Congress shall be Spanish, French, Portuguese and English. (General Regulation 9.)

Registration.—The registration fee shall be \$10 for each member residing in the United States, but no fee shall be charged to foreign members. Each registered member shall receive a card of membership and be furnished a set of the transactions. (Special Regulation 2.)

Abstracts, Papers and Discussions.—Contributors are required to forward abstracts of their papers, not to exceed six hundred words each, to be in the hands of the Secretary-General not later than the 10th of July, 1893. These abstracts shall be translated into English, French, Spanish and Portuguese, and shall be published in advance of the meeting for the convenience of the Congress, and no paper shall be placed upon the program which has not been thus presented by abstract. Abstracts will be translated by the Lit-

erary Bureau of the Congress at the request of contributors, and should be forwarded through the Secretaries of Sections. Papers to be presented to Sections must not consume more than twenty minutes each in reading, and when of greater length must be read by abstract not exceeding twenty minutes in length. Papers read by abstract may be printed in full in the transactions, subject to approval by the Editorial Committee. Papers and discussions will be printed in the language in which they may be presented. All papers read in the Sections; all addresses read in the General Session shall be surrendered to the Secretaries of the Secretary-General as soon as read; and all discussions shall be at once reduced to writing by the participants. (Special Regulation 3.)

Literary Bureau.—The Secretary-General may at his discretion organize a Literary Bureau, which shall consist of such number of linguists as he may determine, whose duty it shall be to do all necessary translating for the Congress, compensation for which service shall be determined by the Executive Committee. Certain members of the Literary Bureau may be designated by the Secretary-General as an Editorial Committee. It shall be the duty of the Editorial Committee to determine the eligibility of all contributions before the same shall be published in the transactions, and to supervise the publication of both the Book of Abstracts and the Transactions. All work done by the Editorial Committee and by the Literary Bureau shall be subject to approval by the Secretary-General. (By-law V.)

THE GEORGIA STATE DENTAL SOCIETY.

The Georgia State Dental Society will hold its Twenty-fifth Annual meeting at Atlanta, Ga., May 9th to 12th, 1893.

OFFICERS.

S. M. Roach, President; N. A. Williams, First Vice-President; R. A. Holliday, Second Vice-President; S. H. Mc-Kee, Recording Secretary; L. D. Carpenter, Corresponding Secretary; H. A. Lowrance, Treasurer.

EXAMINING BOARD.

J. H. Coyle, Chairman; A. G. Bouton, G. W. McElehaney, W. C. Wardlaw and D. D. Atkinson.

EXECUTIVE COMMITTLE.

I. N. Wells, Chairman; Thos. P. Hinman, O. H. McDonald, C. V. Rosser, B. F. Sims.

COMMITTEES.

Operative Dentistry.—J. H. Boozer, J. C. Brewer and B. F. Sims,

Prosthetic Dentistry.—J. L. Fogg, W. G. Brown, W. F. Tigner and G. P. Campbell.

Crown and Bridge Work.—S. A. White, H. H. Johnson

and W. R. Holmes.

Clinics.—J. A. Thornton, F. Holland, W. W. Hill and C, T. Osborn.

Etiology.—S. B. Adair, G. W. H. Whitaker and T. S. Daniel.

Dental Surgery.—G. W. McElhaney, S. B. Barfield and W. C. Wardlaw.

Pathology and Therapeutics.—H. S. Colding, E. B. Marshal and C. V. Rosser.

Education.—B. H. Catching, D. D. Atkinson and J. H. Covle.

Literature.—N. A. Williams, R. B. Adair and A. G. Bouton.

Arrangements:—F. Holland, J. A. Thornton and Thos. P. Hinman.

SPECIAL COMMITTEE.

New Appliances.—J. L. Stokes, W. S. Simmons, R. W. Thornton and W. R. Holmes.

SPECIAL COMMITTEES TO OPEN DISCUSSION.

Bridge and Crown Work.—A. G. Bouton and F. C. Wilson. Operative Dentistry.—O. H. McDonald and L. D. Carpenter.

Pulpless Teeth —J. A. Wills and B. H. Patterson.

Prosthetic Dentistry.—J. B. Cone and W. H. Weaver.

Use of Rubber Dam.—W. C. Wardlaw.

Regulating.—C. V. Rosser.

Pyorrhœa Aveolaris.—A Paper by T. P. Hinman.

AN IMPORTANT NOTICE.

The entire Profession of Georgia are urgently requested to attend this meeting, as permanent arrangements musi be made about attending the Dental Congress at Chicago, in August, 1893. Unless preparations are made in advance for this immense gathering in Chicago, it will be impossible to procure comfortabte quarters.

Atlanta is the birth place of the Georgia State Society, and it is expected that every one of her children will come to the old "hearth-stone" prepared to add something new to the store-house of "dental knowledge."

Everything possible is being done to make this the most entertaining and instructive meeting ever held by the Society. We may expect to see Clinics of high order, and the information derived from them will more than pay for your trip.

The profession from other States are cordially invited to

be present.

Home, Sweet Home! Come and welcome. Yours truly,

L. D. CARPENTER, S. M. ROACH, Corresponding Secretary. President.

ARRANGEMENTS.

Railroad fare one and one-third rate, round trip (provided, 100 or more persons, dentists and members of their families, are in attendance, holding the proper certificate for the re-

duced rate returning).

Special directions: Purchase your ticket through to Atlanta, if you can, taking the proper certificate for return. If you cannot buy a through ticket, procure one to some point where a through ticket can be obtained, taking a receipt or certificate from each agent, as you purchase. This will enable you to secure a reduced rate returning, if certificate is presented on or before May 16th, 1893.

Hotel rates, \$2.00 to \$3.00 per day. Boarding Houses,

\$1.00 or more per day.

L. D. CARPENTER, Cor. Secretary, 47½ Whitehall Street, Atlanta, Ga.

Yery respectfully,

Examining Board meets at the same place May 8th.

ILLINOIS STATE DENTAL SOCIETY AND IOWA STATE DEN-TAL SOCIETY—JOINT MEETING.—The twenty-ninth annual meeting of the Illinois State Dental Society will be held at Rock Island, May 9-12, inclusive. The thirtieth annual meeting of the Iowa State Dental Society will be held at Davenport, May 9-12, inclusive. These cities are located on opposite sides of the Mississippi river and arrangements will be made to hold the meeting jointly, so that those in attendance at the meeting of either society will have an opportunity to listen to the papers, take part in the discussions and witness the clinics of both societies. No effort will be spared to make this union meeting one of the most interesting in the history of each society. Members of both Societies are urgently requested to attend. All dentists are cordially invited to be present. Every one should bring models, specimens, appliances or anything that may be of interest to the profession.

Louis Ottofy, Sec'y Illinois State Dental Society,

Chicago.

W. O. Kulp, Chairman Executive Committee Iowa State Dental Society, Davenport Iowa.

Miscellaneous.

THE OLD AND THE NEW.

Recently a prominent member of the dental profession said to us: "I do not believe the modern made dentist can serve his patients as well as he ought, because he is wedded too much to machinery."

The remark has led us to considerable thought and observation, and may, we think, be a good text for a sermon upon methods of practical instruction almost universally followed. During the past two or three winters we have on several occasions strolled into the clinical laboratories of more than one college, observing methods and manners, and nothing arrested the attention more than the childish dependence of the tyro upon machine methods. The idea of opening and excavating a cavity without a dental engine seems to the average student a queer conceit, a relic of old-fogvism. beginner attacks a cavity with the swift revolving bur it makes an old operator quiver with horror. We believe thoroughly, that the engine can only be used intelligently, decently, and successfully after the operator has first mastered the old and still useful hand justruments. tice teaches what we believe can never be mastered without-viz: familiarity with instruments, familiarity with tooth-structure and its various degrees of resistance, with usual and unusual shapes of cavities, and a thousand and one other things important to know, in order that the eye, hand, and brain may receive needed training. Then when machinery comes in to fill the rightful place, this training teaches to discriminate how and when to use it.

In one of the clinic rooms referred to we stepped up to a chair where a member of the junior class was trying to shape and excavate a cavity with the engine, and assisted by another junior with his foot on the treadle. The following conversation ensued: "Why don't you open up that cavity with a chisel?" "I have no chisel." "Let me see your instruments?" We found they consisted of a fair assortment of engine instruments, a half dozen excavators, an

automatic plugger, etc., the dependence upon shaping and excavating being placed upon engine burs. A spoon-shaped excavator was selected, and telling the student to watch closely, the frail walls were rapidly cut away and the cavity shaped and nearly ready for the filling in two or three minutes. It was a revelation to the student that so much could be done well, rapidly, and almost painlessly with simply one excavator.

We believe that students should be taught first the use of hand instruments, and kept from the engine until they have mastered their use; that our profession and our patients suffer unless this has been done. Let the colleges commence the good work.—Editorial in Western Dental Journal.

DIRECTED TO THE WRONG TOOTH.—Dr. Cook says: I remember an example in a right upper second molar which was very lame on percussion. The patient said it had ached all the previous day and night. There was no decay, and it did not look as if the pulp were dead. I could see no reason why it should have caused all that trouble. The wisdom tooth behind was through the gum—it did not articulate with the lower teeth, but was in close contact with the second molar. The wisdom tooth was extracted; the patient had no more trouble, and the evidence was quite conclusive that the slanting of the third molar, acting as a lever on the second molar was the cause of the trouble.

In sensitive dentine, when patients are extremely timid, Dr. Bogue dips a pledget of cotton into carbolic acid, and then into powdered cocoaine, and places it into the cavity. This, he says, will obtund the sensibility enough to use granulated chloride of zinc with little or no pain. In ninety seconds the insensibility of the cavity is complete.

To Harden Iron All Through.—Ox hoofs and leather are soaked in French nut oil, and are then burnt, pulverized and mixed with sea salt and potash. The following proportions are used: 30 per cent. of hoof, 30 per cent. of leather, 30 per cent. of sea salt, 10 per cent. of potash. This product is said to harden iron all through.—Scientific American.

Itemised Bills,

An old church in Belgium decided to repair its properties, and employed an artist to touch up a large painting. Upon presenting his bill the committee refused payment unless the details were specified, whereupon he presented the items as follows:

ITEMS.

To correcting the Ten Commandments,	5.12
Embellishing Pontius Pilate and putting new ribbons in	-
his hat	3 02
	0.02
Putting new tail on the rooster of St, Peter and mend-	
ing his comb	
Repluming and gilding left wing of Guardian Angel,	5.18
Washing the servant of the High Priest and putting	
carmine in his cheeks,	5.02
Renewing Heaven, adjusting the stars and cleaning up	
the moon,	7.14
Touching up Purgatory and restoring lost souls,	
	0.00
Brightening up the flames of hell, putting new tail on	
the devil, mending his left hoof, and doing sev-	
eral odd jobs for the damned,	7.17
Rebordering the robes of Herod and adjusting his wig,	4.00
Taking the spots off the son of Tobias,	1.30
Cleaning Balam's ass and putting one shoe on him	1.70
Putting ear-ring in Sarah's ears,	
Putting new stone in David's sling, enlarging the head	
of Goliath and extending Saul's legs,	6 12
Decorating Noah's Ark and putting a head on Shem	4.31
Mending the shirt of the Prodigal son and cleaning	
his ear,	3.39
	30 45

Dr. Taft believes in compound fillings. His practice is to fill the cavity to within about an eighth of an inch of the top with amalgam, using broad points at first, then finer ones, followed with Watt's chrystal gold, and finishing with foil or pellets. By this method the doctor avoids unnecessary undercuts and saves time.

MUTILATION OF TEETH AMONGST SAVAGES.

Dr. Magitot of Paris has published an interesting account of the mutilation of the teeth practiced by various savage One variety, which is chiefly met with on the coasts of Africa and the west coast of New Guinea, consists of breaking a portion of the incisor by means of a knife and a piece of wood, and is performed between the ages of twenty and twenty-five. The custom of extracting the two central incisors is found in both hemispheres. According to Zerate it has been practiced in Peru from time immemorial, where it is inflicted on conquered tribes as a sign of slavery. Africa it has been observed on the Congo amongst the Hottentots and the Batoxas. The mutilation by filing has for itt exclusive center the Malayan Archipelago, whence it has spread to the adjoining islands. It is a religious act, which is celebrated with great festivities at the age of puberty, but this only by the Mohammedans. The degree and character of this filing vary with the habits of the family or caste. The operation is performed by an expert, the Tukang Pangur (filer), by means of a chisel, three bricks, two files, a small saw and a pair of cutting nippers, the instruments being rubbed with arsenic and lemon-juice before being used. It is the fashion among some tribes on the Senegal River to extract the upper temporary incisors in girls when quite young and to manipulate the chin, so that it is drawn forward and the lower incisors are made to protrude so as to overlap the upper lip, thus producing an artificial progna-In Indo-China and Japan a girl on her marriage paints her teeth with a black varnish. However, as this operation requires time and money, it is only practiced by the wealthy class. Livingston reported that amongst the Kaffirs a child whose upper teeth erupted before the lower ones, was regarded as a monster and killed. On the Upper Nile the negroes have their upper incisors extracted, in order to avoid this mutilation. Among the Esquimaux, as described by the Abbe Peritat, in some regions there exists a custom of transversely cutting off the upper incisors, the object of this being, according to local tradition, to prevent the human chin from looking like that of a dog. - The Lancet.

DENTISTRY IN FRANCE.

EXTRACTS FROM THE LAW REGULATING THE PRACTICE OF DENTISTRY. TRANSLATED BY L. RALPH DILLON, FROM REYUE ODONTOLOGIQUE.

PART II.

ARTICLE 2. Conditions regulating the practice of dentistry. No one can practice dentistry without having either a medical or dental diploma. The diploma of dental surgeon will be given by the French government after a course of studies organized according to a regulation passed, according to a notice of the superior council of public instruction, and examinations passed before a State establishment of public instruction.

PART IV.

ART. 5. The physicians, dental surgeons and midwives holding foreign diplomas, of whatsoever nationality, can only practice their profession in France, on having obtained diplomas of doctor of medicine, dentist or midwife, there, having conformed to the dispositions foreseen in the preceding articles.

Exemptions from study and examinations can be given by the minister, in accordance with a regulation decided upon in the council of the superior public instruction, in no case the exemptions given to obtain the degree of doctor can hold good for more than three proofs or (trials).

ART. XVIII. The illegal practice of medicine is punished by a fine of 100 to 500 francs, and in case of recurrence, of 500 to 1,000 francs, and of imprisonment of from six days to six months, or to only one of these two penalties.

The illegal practice of dentistry is punished by a fine of from 50 to 100 francs; in case of recurrence, a fine of from 100 to 500 francs.

ART. XIX. The illegal practice of medicine or dentistry, with the usurpation of the title of doctor of medicine or sanitary officer, is punished by a fine of from 1,000 to 2,000 francs, and in a case of recurrence, 2,000 to 3,000 francs and an imprisonment of from six months to a year, or to only one of the two penalties. The usurpation of the title

of dentist will be punished by a fine of from 100 to 500 francs; in the recurrence, a fine of from 500 to 1,000 francs and six days to a month of imprisonment, or one of these two penalties only.

BROTHERS (A.) ON DENTITION AS A FACTOR IN THE CAUS-ATION OF DISEASES IN CHILDREN. EFFECT OF DENTITION ON DISEASE.—Having kept carefully compiled records of about five hundred teething infants in private and dispensary practice, he believes that dentition is rarely if ever, the direct cause of disease; moreover, precocious or retarded dentition may occur in otherwise healthy children of an entire family, but the period of protrusion of the first teeth occurs in healthy breast-fed children at six months and a half in a vast majority of the cases. Further, he concludes as follows: The first dentition is usually complete from the thirteenth to the thirty-sixth month; dentition is distinctly retarded in the first as well as in the late teeth of children brought up on a mixed or artificial diet; congential diseases as syphilis, seems to have a retarding influence on the whole course of dentition. Rickets has a very pronounced retarding influence on the whole course of dentition. seems to hasten the eruption of the first teeth, but does not In cases of undeveloped brain there affect the later teeth. is marked retardation during the entire period of dentition. Chronic diseases have a retarding effect upon the first teeth. but do not seem to influence the later teeth. Children suffering from marasmus seem to be precocious with the first teeth, tardy with the later teeth; while infants in whom epilepsy develops seem to have their first teeth early.—Arch. of Pediatrics.

REMOVING THE SMELL OF IODOFORM, CREOSOTE AND GUAYA-COL.—The Rundschau fur Pharmacie (No. 21, 1892) recommends washing the hands with linseed meal for the removal of the smell of iodoform, creosote and guayacol.

Articles smelling of iodoform are washed in tar-water to which a little oil of wintergreen is added.

Rooms smelling of creosote or guayacol are deodorized by burning coffee in them.

Business Maxims.—The elder Baron Rothschild had the walls of his palace placarded with the following maxims:

Carefully examine every detail of your business.

Be prompt in everything.

Take time to consider, and then decide quickly.

Dare to go forward.

Bear troubles patiently.

Be brave in the struggle of life.

Maintain your integrity as a sacred thing.

Never tell business lies.

Make no useless acquaintances.

Never try to appear something more than you are.

Pay your debts promptly.

Learn how to risk your money at the right moment.

Shun strong liquor.

Employ your time well.

Do not reckon upon chance.

Be polite to everybody.

Never be discouraged.

Then work hard, and you will be certain to succeed!

[Western Dental Journal.

No doubt Japs are very dexterous at tooth-carpentering, as in other branches of human art, but one would like to see the cleverest of them tackling a good lower wisdom that required some lifting. As we are not informed how the difficulties of extracting *roots* are circumvented, the imagination is left to picture a special development of the nails, with the temper of an "Evrard" blade.—London Dental Record.

Can it be expected thet every bridge put into a patient's mouth should be a success, or that every man who tries to put it in should be an artist? We are all bound to make failures. Where is the man that makes a piece of artificial work and does not fail sometimes? We have failures all through life,—H. J. McKellops.

A medical newspaper issued every Saturday is one of the outgrowths of the World's Fair. It is published at Chicago.

THE

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AND LUMINARY.

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No. 5.

Original.

AN OPEN LETTER TO A YOUNG FRIEND.

My Young Friend: I am glad to hear from you again and to learn of your progress at college.

You desire to know why I have substituted and use smooth beveledge scalers for removal of deposits in treatment of pyorrhœa alveolaris, instead of the sharp knife or chisel-edge scalers, which is almost the universal practice.

In reply to your query, I will state frankly, according to my judgment it is contrary to reason and all principles of right in practice to use cutting edge, sharp instruments for removal of calcareous and other deposits on teeth, especially below the enamel edge. A moment's reflection will satisfy any one of the absurdity of the use of sharp scalers. Why the practice has been so long indulged in is surprising, and is a puzzle to my mind.

To remove deposits effectively and without injury to teeth or soft tissues adjacent, is a duty and should be the aim of every dentist when operating. To accomplish the object successfully, with favorable results following, none but smooth bevel-edge scalers can or should be used. Experience confirms the conviction; therefore I can thus proclaim without fear of contradiction:

To dislodge and remove deposits by pressure with bevel-edge scalers, and not by cutting and scraping, has been my theory and practice for many years. With smooth scalers it is easy to determine when every particle of deposit is removed from tooth structure. With eyes closed and ears stopped, educated fingers can easily determine when the execution of the work of removal is complete. Not so in the use of sharp-edge scalers.

With smooth bevel-edge instruments we avoid extreme discomfort to patients during operations for removal of deposits, never cutting or penetrating soft tissues, and we can always avoid cutting or scratching dentine or cementum, which would (often does) prove detrimental to health of gums. A sharp scratch of tooth substance under the gum frequently becomes a local irritant, and requires treatment for relief, when the true cause of the trouble is not comprehended.

It is all important to guard cautiously against injury to toothsubstance below the margin of gum during the operation of removing calcareous or other deposits, that after troubles may not present and prove annoying.

There is no safeguard against injury to teeth or gums in the use of sharp scalers, they cannot be so manipulated as to prevent injury Sometimes deposits at and below the necks of teeth to some extent. causing irritation, inflammation and pus discharge, will dissolve and pass away, and the gum resume a healthy state; but it is not so if a tooth be cut or scratched with the edge of a sharp scaler, the trouble produced will continue until the cause is discovered and removed by artificial means. No one, in my judgment, can successfully remove deposits from teeth with sharp-edge scalers in a well defined case of pyorrhœa alveolaris and have any promise of effecting a cure; but with the use of bevel-edge scalers the result will be favorable, and with appropriate after treatment, a cure can be easily effected, and may safely be promised in a large majority of cases, in from one to two weeks, and in extreme typical cases, short of a month.

My experience in the treatment of pyorrhœa alveolaris has long since established a conviction in my mind that at least ninety or ninety-five per cent. of all the cases that apply for treatment (such as ought to be treated) can be cured, effectually cured, and to the entire satisfaction of patients. I attribute success in treatment greatly to the use of smooth edge scalers. Thorough removal of deposits should be the first step in treatment and is all important.

There are some extreme cases, so far advanced before consultation, the teeth (often all) should be extracted, and when done that settles the matter—cure follows without the aid of local or constitutional remedies. All scalers should be of *spring temper* and so shaped as to be easily applied and effectively manipulated for removal of deposits wherever located above the margin of the alveolar process. There are, sometimes, deposits (varying in character,) located on roots of teeth far below the edge of process, that cannot be reached or removed with any scaling instruments yet invented or any that ever will be invented. Certain things on this line cannot be accomplished now, heretofore or hereafter, therefore it is useless to fool away time trying. In such cases, extraction is the only practical and sure remedy for relief.

The scalers I am now using (all bevel-edge and of delicate structure) I have been using many years and with satisfactory results. I changed and rechanged shape and size, until simplicity, practicability and excellence, in my judgment, was obtained. I can and do cheerfully recommend use of them when you commence practice. Then will be your time and privilege to experiment and test the worth of anything and all things pertaining to practice of dentistry.

This is too much an age of progress in dentistry for continuance in use of sharp-edge scalers. Let them go, as many other instruments have gone, lost to sight and recollection, never to be resurrected. Dentistry will be advanced and the public better served.

To accomplish good results without risk of injury to teeth or gums, in the use of scalers is a duty and a principle that should be observed and respected by every operator. In treating pyorrhœa alveolaris the first consideration should be the extraction of teeth, (such as cannot be made firm in socket) and thorough removal of deposits on necks and roots of teeth, which, if neglected, a cure cannot be effected. The removal of all deposits at one sitting, sometimes requiring from two to three hours, is generally best for patient and operator.

Pyorrhœa alveolaris is not so difficult of cure as some proclaim. It is curable, and can be cured easily, if bevel-edge scalers, instead of sharp be used for removal of deposits. Much of success depends upon the style of scalers used and how used. If they instruct you at college to use sharp-edge scalers, so do as long as you are at college, but when you commence practice think and act for yourself, and give smooth bevel-edge scalers a fair test, and you will soon realize the difference in results.

I may say more on this line in my next.

Yours,

OLD PRACTITIONER.



THE CONSERVATIVE TREATMENT OF TEETH BY GOLD PROCESS.*

BY FRANCIS PEABODY, LOUISVILLE, KY.

The conservation of the dental organs has been, from the commencement of the art of dentistry up to the time when that calling was recognized as a profession, the first aim of those who had the true welfare of humanity at heart.

In the earlier days, when but little was known of the dental organism, efforts were made in a crude way, with crude materials, (lead being used, perhaps, more than any other article,) to save the teeth from destruction by decay, and, to a certain extent, success crowned the efforts of those engaged in this work. Little by little a better understanding of the requirements of stoppings was attained, advancements were made with filling materials, until the royal virgin metal gold came to be recognized as the one thing by which the best results were to be obtained, and in our present state of attainments this metal still holds the supremacy. Are we correct in this? Are we justified in maintaining that gold is the best material to use in our efforts to save the teeth? Is it the most compatible of all our list of filling materials with the dentine of the tooth, with the general tooth structure? And if so, is it the most compatible in all the cases that come under our care? Are we right in using it regardless of the character of the dentine, and enamel, with which it comes in contact? Who that has had any extensive experience would use gold in a cavity from decay in a chalky tooth, or in one attacked with white caries, and expect by this material to conserve that tooth, to check its disintegration, the continued breaking down of its substance for any length of time? In teeth, where the adjustment of the rubber dam is difficult, where there is a doubt of keeping the cavity absolutely dry throughout the operation, where the length of time consumed causes a tax on the patient's strength to such an extent, we feel compelled to hurry our work, thus failing to give it the care it requires to insure conservative and durable results. In approximal cavities in the posterior teeth, where the mouth is small and it is almost impossible to gain proper access, is gold the best thing to use? Would not some other material suggest itself as being more suitable to these conditions? Is not a perfect filling, made from a baser material, better than an

^{*} Read before the Mississippi State Dental Society, April 6th, 1893.

imperfect one from the best? Why is it that we have so largely given up the use of tin in our approximal cavities that are accessible? It is certainly conservative in its character, and teeth have been saved by it for twenty or thirty years. Is it because we cannot obtain as remunerative a fee for tin as for gold, that we fail to use it? Is it that we are unwilling to have other members of the profession note our work, fearing adverse criticism, and possibly a suggestion that we were not equal to the emergency with the finer metal? Or is it that we doubt the saving qualities of that metal in the teeth? Experience justifies in saying, where tin does not have to bear the friction of attrition, where it will not be worn away by mastication, it is the equal if not the superior of gold as a conservative filling; and particularly is this the case in teeth of a soft structure.

A short time since an article appeared in one of our journals from a representative member of the dental profession, in which the statement was made that tin at the cervical wall of a cavity was of no value, and then he adds, "I have never used tin."

Are we to take such statements as this for a text on which to build our faith? Are we to be guided in our practice by the opinions of one person who acknowledges he has had no experience from which to form his conclusions?

Why do we use gold as a filling material? Is it because we find it saves the teeth better than anything else, or is it because it is soft in its character and conforms well to the shape of the cavity we wish to stop, and is pleasing to the eye, and is not glaringly in contrast to the color of the tooth, and being a pure metal does not discolor in the mouth, having no affinity for oxygen or sulphuretted hydrogen?

Basing an argument on the admission that gold is always preferable, the question arises, what kind shall we use?

To day, many operators, capable of executing beautiful work, claim that cohesive gold is the only form by which perfect results may be obtained. Would it not be safe to suggest that those who make this claim have not learned to handle gold in any other way? They have had fair results from their methods; they have had failures. Do they attribute their failures to the character of the filling material, or to faulty manipulation, or to both? Pinning their faith to the one method they have been taught. Knowing no other, does it ever occur to them that some other material, or some other method of using the material with which they are familiar, might save them many annoying failures, and much mortification? Much antagonism is expected when the statement is made that soft or non-

cohesive foil has more saving properties when introduced into a cavity in a tooth, than gold of a cohesive character. Antagonism is desired, that the statement may be thoroughly canvassed and disproved if found false.

The writer disclaims any intention or desire to inveigh against the use of cohesive foil. Its value is recognized; it has its place. and in some instances can accomplish that which cannot be done with foil in any other form: but the statement is ventured that it is less kindly received by the enamel and dentine, that it is less in harmony with the tooth structure, that in its use enamel margins are more liable to be broken down, and that it cannot be brought into as close contact with the walls of a cavity as foil that depends on other principles than cohesion for its retention. The use of noncohesive foil does not depend on one method only. It may be used on the wedge principle, one part supporting another, each piece acting as the key-stone of an arch. It may be packed, on the principle of incorporation, one portion being locked, dovetailed, or incorporated into another mechanically, or it may be made to cohere by rotation of the instrument, for, while unlike so-called cohesive gold, non-cohesive gold is cohesive on the same principle that all pure metals are, by molecular cohesion, or attraction of their molecules. Foil that depends on the wedging, or other principles, aside from cohesion from heat, can be forced to the point desired, and pressure on its surface, whether from hand or mallet, is felt through its whole substance, and all additional pressure or blows serve to drive it more closely to its place. It spreads under the burnisher readily, and can be made sufficiently hard for all practical purposes, either in approximal or coronal surfaces—not as hard as cohesive foil, and it is just this hardness at the cervical walls that we wish to avoid, for undue density does not tend to conservatism. Cohesive foil is less tractable; it must be placed just where it is wanted, for it cannot be driven there. Pressure, instead of being felt through its substance, only serves to harden its surface, and all the blows that can be rained on the surface of a filling that is not in absolute contact with the walls of a cavity will not make it hug them more closely. In short, soft foil can be made to fit the cavity more thoroughly, to keep out moisture and microbes, and to prevent the recurrence of decay at the margins of the filling, in the same way that a velvet cork will fit more closely, more securely, in the mouth of a bottle, than of a less yielding substance.

At the cervix of a cavity, and at all its margins, soft foil is preferable to cohesive, and in the approximal surfaces of the posterior

teeth, tin or alloy is probably better than gold at the gingival margin where it can be used, (and it is seldom that it cannot.) No pits or retaining points are necessary to start the filling, and these are always better dispensed with. In examining a mouth some time since, that had in it quite a number of large approximal fillings of cohesive foil, made by an expert operator, some ten or twelve years prior to the time it was seen, every one of the fillings were found defective at the cervical wall, secondary decay having occurred, excepting in one, the gingival margin having been filled with tin, on to which gold had been built. The marginal walls of this were perfect.

Is it easy to use non-cohesive foil skillfully? No! It is no lazy man's work. It requires strong muscular exertion. A filling (?) can be made of cohesive foil by the average operator that will remain in the cavity with more certainty than if made of soft foil, but the latter will be more conservative, and can be introduced in less than half the time, saving our own backs, and the neck of the patient from prolonged fatigue.

Will cohesive foil save teeth? Undoubtedly; but it requires a greater degree of patience, a larger expenditure of time, and more prolonged physical exhaustion than is required by the use of soft foil to produce equally good results.

Before the introduction of cohesive foil teeth were filled with gold that was non-cohesive, with soft gold, the softer the better; and those fillings, put in forty or more years ago, in many cases, are still standing, preserving the teeth, monuments of the skill of the workers of the material then almost exclusively used.

Have we deterioated? Have we lost the skill, or rather failed to attain that of the old masters of fifty years ago, as the painter has failed to recover that of the old masters of his art of hundreds of years ago?

Why do fillings of gold fail? Sometimes from lack of judgment as to where it should be used, (for there are certain kinds of chalky teeth that gold will not save no matter how used or by whom,) and as frequently from a lack of skill how to use it.

There are certain fundamental rules that must not be neglected, that must ever be our guide when a tooth is filled with gold, if we wish success to attend our operations. One of these is to so manipulate the material that it will never, under pressure, draw away from the margins of the cavity. This can be accomplished by always having the filling higher in the centre than at the edges during the process of construction. If this is not done, a microscopic separa-

tion of gold from tooth is liable to follow, allowing fluids to enter, thus establishing secondary decay. This refers more particularly to approximal cavities in the posterior teeth, though it is a good rule to follow in every instance.

In the anterior teeth, in approximal surfaces, where the cavities are not slotted, the inner portion of the filling should always be in advance of the external, that there may not be left a pit at the cutting edge which is almost impossible to fill. That the cavity should be thoroughly dry is hardly necessary to mention, though, before the days of rubber dam, teeth have been successfully filled under water; but this was with non-cohesive foil in the form of cylinders. Many operators annual their gold by passing it through the flame of a lamp. This is better avoided, as an excess of heat tends to make it harsh and less yielding under the instrument. Many other rules which should govern the operator in his manipulation of gold can only be learned by experience. Each one knows something of value which has escaped the observation of others, and a free ventilation of this subject will put all in possession of valuable information.

What of the alloys as conservers of dentine? They unquestionably have value, if used properly. What is the proper way to use them? Some state they should be used as dry as possible; others say too little mercury impairs their value. There is yet much to be learned about them. Undoubtedly much of the success and failure attending their use depends more in the manner of mixing than in manipulation. They do prevent decay at cervial walls, and in repairing extensive gold fillings they are better than gold itself. Before the days of alloy, or amalgam, as it was then called, teeth that were badly broken down were removed as there was no way known of saving them. To-day, comparatively useless shells are made serviceable for years by its use.

There seems to be a want of harmony between gold and certain portions of the calcific structure of the dental organs which is less noticeable in other metalic fillings. This is due either to the fluids of the oral cavity, (for it is that portion of the tooth around which the secretions linger that is most liable to give away) or to the imperfect adaptation of gold to marginal walls. Want of cleanliness enters largely into these conditions; but while this is a factor, it is not the only cause, otherwise all metallic stoppings would produce a similar result. The ideal filling material is yet to be discovered.

The cements are valuable where they do not approach the cervix of the tooth, for at this point they disintegrate, or wash away rapidly. On the coronal surface they seem to waste only by attrition.

We are all inclined to recommend and laud that with which we have had the greatest success. That is natural; but is liable to lead us into hobbies. An eclectic practice will make us more liberal in our views, and certainly tend to give our patients the best services.

"A PLEA FOR PHYSIOLOGY AND HISTOLOGY."*

BY DR. J. D. KILLIAN.

Mr. President and Gentlemen of the Mississippi Association:

Being a young practitioner, I trust I may not be considered presumptuous for venturing on ground on which it would appear that you who have grown gray in the profession are much more at home than the beginner, and are rather able to teach him how to tread it and conduct himself while on it. For that reason I wish that more young men were present, for what I have to say would appear to apply to the young members of the profession; still, as some of the evils of which I shall speak exist in the practice of some of the older ones, I do not deem them entirely out of place, and my remarks may cause suggestions and bring out ideas that may be of benefit to all.

The ground upon which I am going to venture may, I suppose, in a sense, be termed theoretical, and sound rather strongly of this much vexed subject. The charge is often made that the present age is too practical, that we are inclined to give no quarter to theories unless they can instantly be made productive. Theorists have little sympathy with the hue and cry for results which form the burden of the people's prayer in the later part of the nineteenth century; and, possibly, they are in a measure justified.

This is an age of industrialism, and no other calling has reaped greater returns than dentistry. The discrepancy between theory and practice in the past has led us to try everything in the operating room and laboratory before we pass judgment on it, and the result is, that we have advanced rapidly in manipulative measures, and have brought the mechanical aspect of dentistry to a state of perfection never before reached; but it is hardly safe to claim, because we are not able to make practical use of theory, that it must necessarily be of no benefit. The truth is, that a theory incapable of demonstration is often of value through its suggestiveness. 'Midst the

^{*}Read before the Mississippi State Dental Society, April 5th, 1893.

busy rush of this waning century we read, commend and then for-To appeal to men's minds we must cry from the housetops. and keep crying till we attract attention. My present purpose is not, therefore, to discuss the ideas and theories now advanced, neither is it to add different ones, but simply to lend emphasis to the facts already known, and try and impress you with the importance of having a thorough and practical knowledge of the functional activities of man and his structual development. To obtain this knowledge we must apply ourselves to the study of physiology and histology, and I feel confident in saying that they are branches of the healing art that have been sadly neglected, especially by the dental profession. Don't understand me to say that the dental colleges do not try to impress the student with the importance of these studies, for they do. But the average college man has but one idea in view—one goal for which he is striving, and that is graduation, simply to get his diploma, and he attends lectures with the avowed intention to forget all he has taken, under compulsion, as soon as possible after graduation. He studies physiology and histology simply because the faculty require it, not that he ever expects to reap any benefit from it in after practice. But physiology means more than a branch at college, more than book learning, "that is all ruffle and no shirt," as the old man said. It is the window through which we inspect the functional activities of man, and must be studied from comparison and observation to be of any practical use. may read a very accurate and minute description of some complicated piece of machinery, and picture in your mind's eye all its movements and mechanism to your own satisfaction, yet when seeing it in operation you find that you had conceived hardly a correct idea concerning it. The human body is nothing but a complicated piece of mechanism, and to comprehend its magnitude we must be familiar with its structure and arrangement, and an observer of its slightest movements in active life, if we expect to be of any assistance to it in performing its natural functions while in a diseased state.

The comparative study of man is now recognized as the only scientific method, and it is the only one generally pursued; not only is his anatomy better illuminated by comparison with the lower animals, but his physiology is better understood. Prof. Jos. LeConte (Evolution and Religious Thoughts) says: "There are two widely distinct views concerning the relation of man to nature, one as old as the history of human thought, the other only now urged upon us by modern science. According to one, man is the counterpart and

equivalent of nature; he alone has an immortal spirit, and therefore belongs to a world of his own. According to the other, man is but a part, a very insignificant part, of nature, and connected in theclosest way with all other parts, especially with the animal kingdom. Man's body is identical with all nature in its chemical constituents, with all vertebrates, especially mammals, in its streture." "Therefore anatomy has become truly scientific only through comparative anatomy, and physiology through comparative physiology." "There must be breadth of knowledge as well as depth; and to secure breadth we must study collateral branches, as exclusive attention to one thing will make a deep student but a narrow mind." And if we propose to make dentistry a branch of the "healing art," which it is, we should begin at the very foundation of organism, and study the human body in all its different stages and activities: true we can make dental laborers or dental workmen, but we cannot make Doctors of Dental Surgery without a scientific knowledge of the structure and physical activities of man. How can we expect to make successful practitioners without this, vet how many dentists, as you meet them on the road, college graduates, dentists who carry diplomas, can tell you how many heartbeats or how many pulsations their patient is entitled to. How many can you find that can explain the action of chloroform, ether, nitrous oxide or cocaine, and tell you by what means they cause insensibility, or tell you what relation the fifth pair of nerves bear to those governing the heart's action, and why the danger incurred is greater in giving an anæsthetic when they are involved in an operation. Graduates from any dental college are entitled to administer an anæsthetic, and why do not they take advantage of the privilege? Is it because they are ignorant of all these important facts? If so, I thank our All-wise Creator for making dentists of honest men who are too conscientious to undertake something that they do not understand, and would endanger the lives of their fel-But it is the duty of every dentist to do what he can to alleviate the pain of all operations, and he should be competent to employ every means known to the medical and dental science to accomplish that end. I do not advocate the use of a general anæsthetic, but I do think that we should be able to administer one whenever necessary, and for that reason alone, if nothing else, we should understand the physiological and structural development of man.

And as for Histology, the science of structure, it is far more important than its understanding among the average dentists would

indicate. They know it not, and even if they ever read it, they do You hear them speak very glibly of absorbtion, not understand it. and vet they can speak Danish as easily as they can explain its nature. You hear them speak of teeth pushing their way through the gums, and you can almost imagine you can see the legs of the teeth sticking out behind as they tug and strain to get through. How many can you find that can explain the nature and functions of giant cells, with any degree of intelligence, and yet they speak of the absorption of the roots of the deciduous teeth without having the least idea how it is done. We say that "Physiological organism, by virtue of its change of matter, has the capacity to remove from the body that which cannot be made useful, and does not participate in its functions." That we admit; but what we want is to be able to give the different processes by which these changes are brought about. The average college graduated dentist, who gets his diploma by the skin of his teeth, thinks of Histology as the development of the teeth-nothing more, nothing less; he fixes it in his mind by that, and that is his only hold on it. We all know we invite structural changes by the premature extraction of deciduous teeth, and by so doing even promote irregularities, instead of stopping them, and I am afraid the natural tendency of many is to shirk the responsibility and perform an operation that will most readily free us of the difficulty regardless of remote consequences; but such practice is detrimental to the reputation of the operator, and it is folly to perform hasty and imperfect operations on the plea that the occasion does not warrant the effort, and it is cowardly to extract teeth simply because success is doubtful. No wonder people lose faith in the vaunted progress of conservative dentistry, under such circumstances; and an intelligent man will not do thus. while building up a reputation, but will, in each case, endeavor to approach as near success as lies in his power. Was there ever an earnest, progressive dentist who has not often wished he might be saved the annoyance of failure resulting from his inability to properly meet and overcome difficulties arising in certain cases frequently encountered. Have we not arrived at the pinnacle of our achievements in mechanical dentistry; if so, then it behooves us, more and more, to save the natural teeth, and to do this and successfully overcome failures, we must be familiar with their structural development.

We all have our ambitions, and there is more room in the dental profession for advancement, and more laurels to be won, than in any other science or profession known. True it has made vast strides toward perfection in the mechanical departments, in the past decade, but there is still a vast field for improvement before us, especially so from a theoretical and scientific standpoint. We all want to be conquerors, none of us want to be beaten, and that is death. There is plenty of room at the top of the ladder, and it is our duty to put forth every effort to reach it-not only a duty we owe ourselves, but one we owe to every member of the profession and to the patronizing public, but we cannot expect to reach the pinnacle of success unless we apply our studies to theory as well as practice. prime secret of our great men is not money and friends; they have not made them great and successful so much as it is economizing the means that they have, and promptly improving every opportunity and being thorough in everything they undertake. great who does perfectly what he has to do each day, and he is successful who builds well all the way up from the foundation." anatomy with Physiology and Histology is the bed-rock on which we should lav the foundation stones of success as practitioners of dentistry.

Campho-phenique is spoken of very highly by Professor O. N. Bedell, of St. Louis. He says: I have used it with much benefit in after-pain of teeth extraction, especially of ulcerated teeth; also in pain and tenderness of teeth from poisoning, salivation, necrosis of alveolar, and in many cases of inflammation, pulpitis, pericementitis, alveolar abscess, stomatitis, etc. No student or practitioner of dentistry can well say his list of remedies is complete without campho-phenique being represented.—Items.

I HAVE just seen an instance of the injury of allowing little pieces of amalgam to lodge between the teeth when filling proximal cavities. A piece thus left between the teeth had sunk into the alveolus, causing severe and constant soreness and slipping of the alveolus. The young man supposed it was an abscess or ulceration from poison, but it proved to be only the irritation of a piece of rough amalgam left there when filling a cavity.—J. F. Steele.

THE Medical Journal claims that the possibility of secondary hemorrhage is increased when carbolic acid has been used for the antiseptic solution in a wound. It acts on the clot, rendering it friable and liable to be washed away.



PROCEEDINGS

OF THE

MISSISSIPPI STATE DENTAL ASSOCIATION,

NINETEENTH ANNUAL SESSION, HELD AT JACKSON, APRIL 5th, 6th, 7th, 1893.

[Reported for the Association by Mrs. J. M. Walker, Bay St. Louis.

The Mississippi State Dental Association convened in Nineteenth Annual Session, in Jackson, on the 5th day of April, 1893, in the Senate Chamber of the State Capitol.

The meeting was opened with prayer by the Rev. John Hunter, of Jackson, Rector of the Church of the Advent.

Dr. R. K. Luckie, Holly Springs, introduced the Mayor of the City, Hon. L. F. Chiles, who bade the members of the Association welcome in the following terms:

No doubt there are some of you who look for a lengthy oration from me on this occasion, but those who have known me longest and best expect nothing of the kind. The pleasant duty devolves upon me, as the representative of our Capital City, to welcome you here. Jackson boasts of its various institutions, of its beautiful homes, and more especially of its beautiful women. As the representative of all these, and in the name of all these, I bid you welcome. And when your labors are finished here, and you have returned to your homes, we trust your visit will have been such that you may look back upon it with pride and with pleasure.

Dr. Luckie next introduced Dr. J. B. Askew, of Vicksburg, who responded to the address of welcome in a very happy manner. He said that his selection was not altogether inappropriate as he was a Hinds county man, to the manner born, and knew what Jackson welcomes meant. He reviewed the early history of Jackson, from the time it was "a little straggling village of ancient looking, dingy houses, and had in the way of railroad facilities two apologies for railroads—each consisting of the right of way and two streaks of rust. To-day we see one of the most beautiful little cities in the United States, with handsome buildings of modern style of architecture, and four well equipped railroads. Its public buildings are a credit alike to it.

"It is now not only the capital of the State but one of the most important commercial centers in the State. We see the spirit of

enterprise manifested in every direction, and conclusive evidence on every hand that its citizens are abreast of the times in encouraging such enterprises as constitute the general make-up of a prosperous city.

"Yes, I have seen these people in almost every vicissitude of life, and I have never seen them under any circumstances when they were not equal to the emergency."

He regretted that he was only able to offer this feeble tribute to the citizens of Jackson, in accepting the hearty welcome tendered the Mississippi State Dental Association.

Dr. Luckie then introduced Dr. A. A. Dillehay, Meridian, President of the Association, who proceeded to deliver the Annual Address, as follows:

I feel inadequate to the task of addressing this intelligent and scientific body of men, but I am now one of the old members of the profession and Association, and therefore feel that I have a right to express my views boldly and fearlessly.

Some of my remarks may appear severe, but I assure you that they are not intended to wound the feelings of any one, but every expression comes from a heart which beats in sympathy with every other, whose motives are for the interest of our honored profession.

My friend Westmoreland has said that I have some hobby at each Association. This time it is "Dental Ethics."

We are now passing through one of the greatest eras of this age. The acts of the Constitutional Convention has given our race the rule of our State for years to come. The election of Cleaveland as President by an overwhelming majority, has blotted out of existence the worst enemy of the South, the Republican party. As our State and Union are being purified, we should be stimulated to increase our energies, to purge our profession, and thereby be called "blessed" by the coming generations.

The first step in this direction should be, to use every available means to induce each dentist in the State to become a member of our Association, whether he be educated or uneducated. After getting them among us, we can, by example and precept, impress upon them the dignity of our profession. Our Association is not intended merely for the intelligent or those who have had the best opportunities, though it is expected that this class should bear the burdens, and endeavor to instill into the minds of those less cultivated or less interested, a sense of the responsibilities they have taken upon

themselves in practicing a profession which requires a thorough dental education. They could learn (as well as we) many valuable points which would be of great benefit in every day practice, and would, perhaps, have a tendency to stimulate each one to a higher sense of duty and degree of us fulness. Would that every dentist would read and reread our Code of Ethics until it is so impressed upon him that any violation will gnaw at his conscience until repentance produces regeneration, for never can we elevate our profession to its proper standard until every man shakes hands with his brother dentist in saying "upward and onward."

I hope there are none in this Association who would allow our banner to be trailed in the dust, tattered or torn, by laying aside honor and pride for greed and filthy lucre. Our Code of Ethics should govern not only members of this Association, but every true may who desires to elevate the standard of his profession and establish a name that will be an honor to him and his family, instead of being pointed at with the finger of scorn by his professional brethren. Gentlemen, I wish to call your attention to Article II., part of Sections 3 and 5, of our Code:

"Section 3. It is unprofessional to resort to public advertisements calling attention to peculiar style of work, lowness of price, special mode of operating, or to claim superiority of work over neighbor practitioners.

"Section 5. When general rules shall have been adopted by members of the same locality, in relation to fees, it is unprofessional and dishonorable to depart from those rules."

I hope no dentist of any standing (and especially a member of this Association) will blow his own horn in flaming advertisements, calling attention to his special mode of practice, claiming to do dental operations free of pain, besides various other modes too numerous to mention. Then here comes the cheap John, poor deluded man, cutting in prices, admitting his own inferiority and inability to cope with his neighbor. Does he not know we are valued according to our own valuation? Remember, too, that you only act as a mirror, reflecting good or bad on the college which conferred on you the degree of D. D. S. Are you willing to bring a stigma on those who have toiled so faithfully to prepare you to battle with life? I hope not. I will quote Dr. Geo. J. Freidrich's views on an advertising dentist, read before the Louisiana Association, in 1886. His first allusion is to the uneducated dentist:

"This is the class which generally produces the advertising dentist, though it is composed, with sorrow and shame, of some who

have drunk at the fount of knowledge. So lost to every honorable impulse, so debased in principle, as to disgrace his Alma Mater for lucre's sake. Advertising dentist! By their fruits shall ye know them.

"An advertising dentist is not a modest man, for he does not 'hide his light under a bushel.' He is not a contented man, for he publishes to the world that a generous public has not awarded him his share of employment. He is not an upright man, for he digraces the edicts of his profession in not obeying its Code of Ethics. He is an unprincipled man, for he tries to raise his own status by belittling the standard of his fellow practitioners. He is an arrogant man, for he knows it all. I pity the man, who, in his arrogance, places himself above being taught. He is a conceited man, for he judges others by his own standard. He is a selfish man, for his whole soul is wrapped in self, and to him the almighty dollar attracts every spark of honorable merit. Lastly, he is a dishonest man, for he promises results which he knows cannot be attained."

Gentlemen, I think our By-Laws should provide for a Committee on Grievances and Complaints, consisting of the President and First and Second Vice-Presidents; and it should be their duty to investigate all cases where the Code of Ethics has been violated, and use every exertion to prevail upon the violator to desist, and if they cannot satisfactorily settle the case, then report it to the Association at its next meeting.

I would suggest that every city or county organize a local association, adopting the Constitution, By-Laws and Code of Ethics of our State Association; that they invite each dentist practicing in or near each locality to become a member of said body. If these local bodies should be organized, it will have a tendency to draw the profession closer together, and members will become better acquainted with each other. This union of purpose will inspire in each a feeling of aggressiveness which will result perhaps in immeasurable benefit for not only our Annual Association but for the profession at large.

I further suggest that each local association appoint a committee whose duty it shall be to report to the Grand Jury or District Attorney any violation of our dental law.

If we expect to purge our State of the empiric or impostor, we as a profession must put our shoulders to the wheel, and each one declare himself a committee of one to aid the Board of Examiners to enforce the dental law. The sooner we get to work the better it will be for the coming generation. To the old members of our

profession who have for years been battling with the diseases of the organic and inorganic bodies of the human system, I would say, will you fail to set a good example to the coming generation?

And young men, to you is intrusted the works of your forefathers. You who glory in improving the pearly pebbles that glitter between the ruby lips of some fair maiden, will you dare to bring disgrace upon the profession of your choice? I hope not. Let it ever be your aim to aid in upbuilding our profession. Participate in every effort that will bring success thereto.

Gentlemen, I guess that you are all aware that the World's Columbian Dental Congress will convene in Chicago, August 14th to the 19th. The object of this congress is to bring together men of our profession, here and abroad, which aside from the social pleasure, will bring untold benefit scientifically and professionally.

Now, gentlemen, let us rally to the front, bringing our powers to bear and make Mississippi equal if not in advance of any State in the Union. I hope we will be well represented. I feel sure that it will bring to each of us that attends a harvest of beneficial truths as pertaining to our profession.

I will now say in conclusion that I hope each member will return from this meeting with new inspiration, resolving to do all in his power to add to the interest of the Association from year to year.

A. A. DILLEHAY,

President Mississippi State Dental Association.

On motion of Dr. W. H. Morgan, the President's Address was placed in the hands of the following committee: Drs. J. B. Askew, Geo. B. Rembert, T. C. West, for presentation to the Association for discussion.

On motion, the reading of the minutes of the last meeting was dispensed with, as they have been published and distributed among the members.

After a recess for roll call and payment of dues, the Report of the Recording Secretary was read, as follows:

Mr. President and Fellow Members of the Association:

The Association having voted at our last session not to enforce the resolution adopted at a previous meeting, in regard to non-payment of back dues, I have nothing to report on that subject.

As instructed, I transmitted to the Governor of the State a copy of the resolution adopted, and action upon the same, in regard to members elected for recommendation as members of the new Board of Dental Examiners, together with the names of the five men elected. The value of your recommendation is recognized in the appointment of three of the five recommended.

I desire to ask the approval of the Association of my unauthorized action in purchasing additional books for the Recording Secretary's office. I found it impossible to keep the records of the Association in proper shape without a book for roll call and record of unpaid dues, and a set of receipts for individual dues paid at roll call. Respectfully submitted,

W. E. WALKER,

Recording Secretary.

On motion, the Secretary's action was approved and his report accepted.

As acting Treasurer at the last meeting, Dr. Walker also submitted the following report:

To balance in Treasury as per Treasurer's report \$ 1 50 To balance on annual dues, 1892, from nineteen members who

paid \$1.00 in advance at Biloxi										
To full annual dues, 1892, eleven members	22 00									
To back dues collected	6 00									
To initiation fee and dues, seven new members	35 00									

\$83 50

CR.

As per onis approved by Finance Committee:																		
	Dr. D. B. McHenry	•		•						•				•		\$ 8	2 5	
	Dr. P. H. Wright	•		•	•						•					8	85	
	Dr. A. H. Hilzim.						•		•	•						3	5 0	
	Rent of hall			•		•	•			•	•	•	•		•	5	00—\$25	60

W. E. WALKER,
Acting Treasurer.

On motion, the report was approved and accepted.

The resignation of Dr. A. G. Tillman, Vicksburg, as member of the Association was tendered in a letter read by the Secretary.

Dr. Dillehay, President, stated that some time since, having been informed that Dr. Tillman had an unprofessional advertisement in the daily papers, he had felt it his duty to call his attention to the fact that such a card was a violation of the Code of Ethics. In reply he had received a letter most honorable and high-minded in tone, promising immediate withdrawal of the card. He regretted to hear

this resignation, as he hated to lose such a man from the Society, though not personally acquainted with him.

Dr. Rembert moved that the resignation be accepted; seconded by Dr. West.

Dr. W. H. Morgan: Many of those present know that I am a Methodist, and that I carry my religious principles into all my business. If a man falls from grace and then wishes to come back to us, we take him on probation. We never give him over to satan without an effort to withhold him.

Dr. West: I would not willingly do an injustice to any man, but Dr. Tillman leaves us no alternative. He says absolutely *I resign*. He gives us no cause, assigns no reason for his action. It seems to be his express desire to withdraw from our Association, and it seems to me his request should be granted.

Dr. Warriner: If we knew that he has withdrawn his advertisement we could refuse to accept his resignation.

Dr. Rembert: I do not see how we are to find out his motive. A committee might be appointed to investigate and report, action being deferred for the time being.

The President called Dr. Luckie (in the absence of the three Vice-Presidents) to the chair, and took the floor.

Dr. Dillehay: I wish to present my views on the question before Here is a young gentleman who has done wrong. He recog-118. nizes it, and is ready to advance to a higher standard. We should not crush each other down. I have great sympathy with our young men. If they fall from grace, and we can raise them up, let us do He doubtless feels that he has done the Association an injustice and wishes to withdraw; but he may yet live to be an honor to the profession and to the Association. His prompt admission of his error in his infraction of the Code, stimulates in me a desire to hold him up. I think a committee might be appointed to investigate his reasons for withdrawal, and if it proves to be his real desire, then it should be accepted and the Recording Secretary so notified; but if no effort is made to retain him among us, he may become desperate and resort to flaming advertisements and cut prices, making us hear from him to our sorrow and shame.

Dr. J. B. Askew: I was not here when this question was opened, but am under the impression that this resignation may be tendered merely to take time by the forelock and forestall expulsion on the grounds of unprofessional conduct in violation of the Code of Ethics. In view of the fact that he has written to the President, regretting his unprofessional advertisement, I see no imprepriety

in letting the thing stand in statu que until our next meeting. No harm will be done if no action is taken. By giving him time for deliberation I think he will again fall into rank. I do not think he will go into the "Cheap John" business. I do not think he is that kind of a man. I believe he may yet make a useful member of the Society.

Dr. Rembert: I withdraw my motion with the permission of my second.

Dr. Luckie: I move that the Secretary be instructed to inform Dr. Tillman of the refusal of the Association to accept his resignation, and their desire to retain him in membership.

Seconded and carried.

In the absence of all the members of the Committee on Membership and Finance, Drs. Spinks, Askew and Crowder were appointed on that committee.

In the temporary absence of the Recording Secretary, Dr. K. S. Moffat was appointed Recording Secretary pro tem.

Dr. R. K. Luckie: I think it is desirable that some arrangement should be made for the publication of our proceedings. I move that Mrs. J. M. Walker be elected to report the same.

Seconded and carried.

Dr. J. B. Askew: It is now in order to agree upon our official journal. I would recommend the SOUTHERN DENTAL JOURNAL as worthy of our support.

Dr. R. K. Luckie: I second that recommendation. Dr. H. H. Johnson has again taken charge of the editorial department and will no doubt bring it up to a high grade of standing.

Portions of a letter from Dr. Johnson outlining recent arrangements made for placing the SOUTHERN DENTAL JOURNAL on a solid foundation, were read by the Secretary.

The offer of Dr. Johnson to "send a copy of the JOURNAL containing the proceedings, free to every dentist in the Society, and also extra copies to dentists throughout the State" was accepted, and on a standing vote the JOURNAL was made the official organ of the Association, and the Secretary instructed to notify the editor of this fact. The Secretary was also instructed to request the publication of the proceedings in a single issue, if feasible, but not in pamphlet form as suggested by Dr. Johnson.

On motion of Dr. P. H. Wright, the Secretary was instructed to request from the Secretary of the Board of Dental Examiners a revised list of all dentists licensed and registered under the new law, the same to be included in the published transactions.

Revised List of Licensed Dentists in the State of Mississippi, under the new law of 1892.

Morgan Adams, Sardis, Miss.; C. R. Adams, Meridian; A. J. Ainsworth, Palestine; W. T. Allen, Amory; J. B. Askew, Vicksburg; J. J. Askew, Water Valley; J. W. Avery, Shubuta.

- E. M. Baker, Trenton, Miss.; B. H. Bailey, Holmesville; J. A. Beavins, Cuba Station; Jas. S. Birdsong, Starkville; T. B. Birdsong, Hazelhurst; J. P. Broadstreet, Grenada; J. M. Brown, Hernando; J. S. Brown, Canton; J. D. Burns, Ripley.
- S. F. Carr, Brandon, Miss.; Geo. B. Clement, Macon; J. C. Clement, Hattiesburg; W. M. Clement, Hattiesburg; W. M. Clement, Jr., Rural Hill; A. H. Cotton, Durant; A. B. Cox, Encutta; C. M. Cox, Ellisville; C. C. Crowder, Kosciusko; G. W. Crowder, Kosciusko.
- D. J. Davis, Greenville, Miss.; W. H. Davison, Fremont; A. A. Dillehay, Meridian; G. W. Dorman, New Albany; Geo. B. Dorsey, Vicksburg; J. D. Downing, Beulah; J. D. Drane, French Camp; B. S. Dudley, Grenada; C. B. Dunning, Crystal Springs.
 - A. B. Evans, Monticello, Miss.
- J. Hyde Ferrell, Newton, Miss.; W. F. Ferrill, Columbia; D. L. Fortenberg, Utica; J. P. Frazer, Canton; J. O. Frilick, Meridian.
- D. M. Gatlin, Ellisville, Miss.; J. A. Giddens, Meridian; T. W. Godbold, Vicksburg; B. F. Grice, Rocky Springs; W. A. Guess, Greenwood; W. H. Guess, Water Valley; W. M. Guess, Water Valley.
- M. O. Harrelson, Raleigh, Miss.; O. J. Harrelson, Sylvarena; J. B. Harris, Hickory; J. A. Herring, Kosciusko; W. L. Hightower, Lake Como; A. H. Hilzim, Jackson; O. B. Hilzim, Greenville; J. L. Holberg, Macon; E. L. Holmes, Bentonia; J. A. Hughes, (col.), Natchez.
- E. M. Jamison, Caledonia, Miss.; L. H. Jeffries, Natchez; R. C. Jeffries, Natchez; A. C. Jones, Jackson, Tenn.
- J. O. Killian, Greenville, Miss.; J. A. Knox, Pontotoc; J. Kolb, Cumberland; T. J. Krouse, Barnett.
- R. K. Luckie, Holly Springs, Miss.; E. T. H. Leonard, Jackson; S. W. Lindsey, Sandersville; N. A. Love, Okolona; J. W. W. Lyle, Cash.
- M. L. Magee, Smithdale, Miss.; J. H. Magruder, Jackson; W. H. Marshall, Oxford; W. H. Marshall, Jr., Oxford; W. T. Martin, Yazoo City; C. S. Matthews, Summit; J. D. Miles, Vicksburg; K. S. Moffat, West Point; W. B. Moon, Sylvarena.

- A. H. McAllister, Cotton Plant, Miss.; C. McDonald, Forrest; D. B. McHenry, Grenada; G. A. McIlhenney, Forrest; W. B. McMahon, Oxford; Thos. McNair, Brookhaven.
 - L. G. Nisbet, Aberdeen, Miss.
- A. S. Oliver, Moscow, Miss.; J. D. Payne, Vicksburg; J. J. Parker, Mount Carmel; W. L. Parker, Rocky Springs; T. O. Payne, Vicksburg; C. E. Pearson, Beach; R. G. Penn, Hazelhurst; W. H. Penn, Brookhaven; J. B. Pleasant, Goodman; H. H. Porter, Pontotoc.
- J. W. Radeliff, Canton, Miss.; H. W. Reabin, Summit; George W. Rembert, Natchez; I. B. Rembert, Jackson; C. R. Rencher, Enterprise; W. V. Rice, Brandon; E. B. Robbins, Vicksburg; C. W. Robinson, Magnolia; A. B. Ross, Holly Springs; J. H. Rush, DeKalb.
- D. F. Sallis, Sallis, Miss.; Robt. Sanderson, Terry; J. F. Scott, Gloster; H. H. Segrist, Brandywine; N. U. Shearman, Memphis, Tenn.; E. F. Shuler, Sallis, Miss.; J. J. Simmons, Verona; W. B. Simmons, Verona; A. B. Sloan, Coldwater; A. S. Smith, Smithburg; Chas. F. Smith, Canton; Frank H. Smith, Water Valley; L. A. Smith, Port Gibson; Luke U. Smith, Flora; J. M. B. Spencer, Pass Christian; H. E. Spencer, McComb City; E. E. Spinks, Meridian; J. C. Spivey, Vicksburg; W. T. Stansbury, Lexington; L. A. Stephenson, Holly Springs; W. C. Stewart, Fayette; W. L. Stoval, Winona; J. E. Suber, Crystal Springs; J. D. Sugg, Aberdeen; A. S. Swett, Vicksburg.
- L. K. Thornton, Pass Christian; A. G. Tillman, Vicksburg; M. Townsend, Water Valley; W. C. Trawick, Crystal Springs; M. C. Vaughn, Ocean Springs; J. R. Vinson, Virgil; T. F. Tynes, McComb City.
- E. T. Wade, Vaiden, Miss.; W. E. Walker, Bay St. Louis; F. W. Wallace, Utica; Hal Waller, Coushatta; Chas. E. Ward, Shubuta; V. H. Ward, Batesville; J. A. Warriner, Corinth; J. B. Watkins, Meridian; V. B. Watts, Brookhaven; W. F. Weathersby, Durant; W. L. Weathersby, Crystal Springs; W. M. Weathersby, Beauregard; W. W. Westmoreland, Columbus; A. H. Weston, Oxford; R. C. Whitehead, Carrolton; W. Whitaker, Summit; J. B. Whitehurst, Short; J. J. Whittle, Gholson; J. C. Wiggins, Eupora; J. D. Wise, West Point; A. A. Wofford, Columbus; B. F. Worsham, Ripley; L. W. Worsham, Corinth; P. H. Wright, Senatobia; J. R. Wyse, Meridian.
 - J. L. Young, Greenville, Miss.

Dr. Luckie, Chairman of the Committee on Clinics, desired that the hours for clinics be now fixed.

After some discussion, it was decided to devote the whole day, Wednesday, to clinics, with a night session at 8 P. M.

On motion, adjourned to 2:30 P. M.

FIRST DAY-AFTERNOON SESSION.

The Association was called to order at 3 P. M., the President in the Chair.

Dr. K. S. Moffat: As the first item of new business, I would ask if this is the proper time to prefer charges against members of the Association for unprofessional conduct?

The Chair: Charges had better be referred to a committee. Is there a motion to that effect? It seems better not to mention names before the Association until after such charges have been investigated.

- Dr. W. H. Morgan: Most bodies adopt that plan, even in the National Association of Faculties. If, after investigation, a charge is found to be frivolous, it is dropped and never made public. In other cases, the committee reports the result of investigation to the Society, which then acts upon that report.
 - Dr. E. E. Spinks advocates such a course.
- Dr. J. B. Askew thinks the suggestion a wise one, and in conformity with the plan outlined in the President's Address.
 - Dr. Morgan: It avoids all wrangling and personalities.
- Dr. J. B. Askew: The greatest inharmony in Associations of every kind arises from acrimonious war of words. It is best to dispose of personal affairs in that way.
- Dr. R. K. Luckie: I move that the President appoint a committee of three to investigate all charges brought up during this meeting.

Carried.

Drs. Luckie, Askew and Spinks appointed as committee on complaints and grievances.

Dr. K. S. Moffat, Recording Secretary pro. tem., read the following communication:

Mr. President and Fellow Members of the Mississippi State Dental Association:

Precedent having established the law that a member of the State Board of Dental Examiners shall not hold office in the State Dental

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Association, I hereby tender my resignation as Recording Secretary, thanking you for the honor you have twice conferred upon me.

Respectfully and fraternally,

W. E. WALKER.

Dr. Moffat: Dr. Walker makes the best Secretary we could have, and I would oppose his resignation unless the law compels it.

Dr. T. C. West: The law of the Association forbids holding two offices by one person.

Dr. Walker's resignation was accepted.

The President: I can only say Dr. Walker has done his whole duty; that covers the whole ground.

There being no further new business, the roll of sections was called.

Section 1.—Surgical Dentistry; J. B. Askew, Chairman. Dr. Askew said he was ashamed to have to admit that as Chairman he had done nothing. Drs. Frazier and Dorsey of the committee absent.

Section 2.—Prosthetic Dentistry; Dr. J. O. Frilick, Chairman. Dr. Frilick said he had understood that he was to open the discussion of papers written by the other members of the committee. Dr. A. H. Hilzim attending meeting of the Board. Dr. T. C. West had expected to discuss Dr. Frilick's paper.

Section 3.—Physiology and Dental Histology; Dr. R. K. Luckie, Chairman. Had not been able to prepare a paper. He stated that Dr. Killian of the committee had prepared a paper but was not present. Dr. L. G. Nisbet, absent.

Section 4.—Pathology and Dental Therapeutics; Dr. Morgan Adams, Chairman, absent. Dr. J. T. Wise, absent, Dr. J. H. Magruder expected to discuss paper promised by Chairman.

Section 5.—Dental Materia Medica; Dr. W. H. Marshall, Chairman, absent. Dr. W. E. Walker prepared with paper but attending meeting of the Board. Dr. P. H. Wright expected to discuss paper of Chairman.

Section 6.—Metallurgy. All the members absent.

Section 7.—Dental Chemistry. Dr. Geo. B. Clement, Chairman. Has paper but engaged with Board. Drs. Miles and Birdsong absent.

Section 8.—Dental Education and Literature. All absent.

Section 9.—Incidents of Office Practice. All absent.

Dr. T. C. West: It is important that we should decide upon some plan by which we can secure papers for our meetings.

The Chair. The plan adopted at the last meeting promised well; namely, that the Chairman of each committee should consider himself the essayist, and submit an outline of his paper to the other members of his committee that they might be prepared to open the discussion of the subject intelligently. I wrote to the Chairman of each committee, explaining the method to the best of my ability, and had the promise of eight papers.

Dr. Killian having come in, now read a paper entitled, "A Pleafor Physiology and Histology." (See page 213.)

Dr. Peabody was invited to open the discussion, but excused himself on the plea of not feeling well.

Dr. Morgan being called upon excused himself, not having heard the paper very clearly.

Dr. Moffat moved a vote of thanks to the young practitioner for the paper read.

The Chair: I don't know that it is customary to make a motion of that character.

Dr. Moffat: I would like to make an exceptional case of this, as being the only paper produced in this body.

The Chair: It is the duty of every member of the Standing Committees to prepare papers, and we would hardly thank a man for doing his duty.

Prof. Peabody: I note a singular lack of enthusiasm on the partof young men in doing their part. I think some recognition is due when one of the younger members does come forward. A good paper should always receive applause. I am tempted to speak on this occasion if for no other reason than because my worthy friend opposite (Dr. Morgan) will be sure to jump on me if I make a break. He can never resist the temptation. The author of the paper made the statement that we do not pay sufficient attention to-Histology and Physiology, the very foundation of dental science. I teach these branches in the college with which I am connected, and can freely say that there are no subjects in the whole curriculum more difficult to understand. I find that it generally requires a lecture two or three times repeated on the same subject. students go home and take up the authorities and study thoroughly to get a complete understanding of the subject. There is no more complicated subject than the origin of the dental structures, because they arise from two distinct tissues, epithelium and connective tissue, organic and calcific tissues combined in one organ. Unless this subject is very thoroughly studied while at college, young men will later attend State or National Associations and hear papers

read on the histology of tooth structure, and find that they fail entirely to understand the speaker, or, if called upon, are unable to raise the voice, or answer the question; for this reason, partly, the subject should be studied while at college when the opportunity is afforded. Recently the stereopticon renders great assistance in making the subject more comprehensible, as we are able to appeal to the eye. Many young men will say, "but I don't see what the physiological structure of a tooth has to do with filling a cavity, or making an artificial denture. I have got my sheepskin and I amsatisfied."

But there are others who want to go to the top. It is true that as skillful operator may perform mere mechanical manipulation without much knowledge of anatomy; but in pathological conditions they are working in the dark. As well give medicine, simply because some one said it was good so I use it. The paper is a good one, and evidences study and investigation.

Dr. Morgan: The paper is very admirable, and I take some personal pride in it because I helped to teach the young man. I tell all my young men, "When you go home and begin to practice goright into your home Association, resolved to work there. At the beginning of the year select some particular subject, and through the year gradually post yourself on it. Then, just before your Association meets, write on that subject, covering only the ground you have well studied. Prepare yourself for its discussion and be ready to defend your position by reference to the authorities. This will soon give you standing in the profession, and it will be said, "there is one man on whom we can always rely for a paper."

There are, perhaps, some points open to discussion. We practice the healing art very much in the dark unless we know something of pathology and histology. I do not say we must understand them perfectly, for I believe that the best of us know only some leading features; but we know something of how tissues are built, and consequently something of how they are unbuilt. There are some cases that can be treated successfully without understanding pathology, as, for instance, some very ignorant men treat cavities of decay by filling, very successfully, though they know nothing of the structure of the tissues; but that is mere empirical, mechanical practice. They know nothing of the basal principles which underlie their work.

In the treatment of disease the first great fundamental idea is the removal of the cause. This done, nature comes in and heals the

patient, though we may sometimes have to give nature assistance. We must stimulate, give strength by astringents, increase vital force by feeding. We must reach out and bring in collateral sciences to contribute to the cure of disease. Before we can learn the nature of disease we must know its pathology. To know the function of an organ we must know its histology. If we begin at the very foundation, our work will be the more substantial.

The paper spoke of absorption—the removal of foreign bodies. We do not understand the character of the processes, but we do know some facts. Some foreign substances are liquified, reduced to atomic conditions and taken up by the capillaries, so that they may float in the fluid of the blood; they thus pass into the circulation and are borne off; but how they are liquified we do not know; but foreign bodies are not always expelled from the body. has three modes of disposing of foreign bodies: 1st. By absorption. They are broken down, liquified and passed off by the emunctories, as the blood, the skin, etc. 2d. They are ejected, as in the case of a splinter. By a process of inflammation and breaking down of the tissues around them, followed by a muscular contraction of the tissues, they are bodily ejected. 3d. They are retained in the body, being encysted. Nature builds up around them a shell of connective tissue of fibrous character, low in organization-a sort of scar tissue, less irritable than normal connective tissue. I believe that the teeth inserted by the Younger system are all retained in this way. This tissue forces its way into all the interstices of the toothtissue, into the canaliculi, hugging them closely, so that they are thus held firmly in place.

Dr. Moffat renewed his motion of a vote of thanks to the writer of the paper, which was carried.

Dr. Morgan said that he wished to add a few words on the subject of this low grade of fibrous encysting tissue which is very important in dentistry. In a tooth which has a large abscess at the apex of the root, the bony structure around the tooth is broken down and carried off, making room for the abscess sac, which is often of very considerable size. When we come to the assistance of nature and remove the cause of the trouble and cure the abscess, nature takes up the work again and forms this abnormal tissue, filling the space about the root of the tooth with a tissue which is not irritable nor subject to inflammation. The tooth-root being thus encysted may remain in position a long time and give no further trouble. If there has been a serumal calculus along the root, breaking down the cementum, leaving a roughened surface, nature will

smooth down this rough surface, leaving it rounded off and smooth, but the process will be much longer. That this scar tissue holds the tooth firmly in its socket is a very important fact. It is the only part in the human system where the contact of soft tissues with devitalized tissue is tolerated. In the tooth itself, dead dentine in contact with living cementum is tolerated, but at the end of the tooth the contact of soft tissue is tolerated; the vitality is of so low grade that it tolerates the presence of the dead end of the tooth where the periosteum has been lifted off. There may perhaps be a slight chronic trouble, but nothing real for perhaps ten or fifteen years.

We must learn to measure the recuperative powers of our patients, bearing in mind that the strumous, cachexic diathesis takes on inflammation easily, as in the negro, and especially the mulatto, where we can rarely preserve the front teeth, and never the back teeth if they have abscessed. The tissues are soft and prone to destructive action. Take a good strong man of good constitution, and we may preserve a devitalized tooth for forty years, but in the scrofulous their duration is very much limited by natural or inherited predisposition. In the negro, abscesses are larger and run their course in much less time. They succumb to fevers in less time; the death list is very large among them. In Nashville, where they constitute but one-third the population, the number of deaths is double that of the white. The mode of life has something to do with it, but constitutional vice more. They die off from pneumonia, dysentery, etc.

The President called for Incidents of Office Practice.

Dr. Moffat said that he had a case on hand on which he would like to get an expression of opinion. The patient is a young girl not yet sixteen years old. The second bicuspid is decayed on the posterior approximal surface, the cavity running up under the gum. The nerve was exposed and bleeding. He destroyed the pulp and removed it, and filled the root and crown with oxyphosphate. The question now is for permanent work. Shall he extract the tooth, trusting that the space will close up, or fill with gold? The patient will not have amalgam. The rest of the teeth, even the adjoining first molar, are in perfect condition.

Dr. Morgan: Sometimes we must defer to the inclination (not the judgment) of the patient and friends. The best thing, in my judgment, would be a gold crown, covering the cavity entirely, and passing under the gum. This would necessitate very little cutting down. The next choice would be a Richmond crown. This would

be less conspicuous, but would necessitate cutting off the crown and banding. If the patient wants the large gold filling, she will probably not object to the appearance of the gold crown. In such a frail tooth, if filled with gold, the buccal or lingual walls along the margin will soon disintegrate and crumble away. Where you have control of the patient, the oxyphosphate filling, closely watched, is undoubtedly the best thing for the tooth. Under the gum tin is well tolerated, as is also copper amalgam, but this soon washes out, though leaving the tooth structure intact.

Dr. Moffat : If the tooth were extracted would not the space fill $\sup \mbox{\bf ?}$

Dr. Morgan: It might, if the adjacent teeth were not held in position by occlusion; but to close the space, all the teeth would swing around towards the vacancy, and the centrals would cross the median line, giving a very unpleasant expression of countenance.

Dr. —— wished to ask Dr. Morgan if he had ever placed a gold crown over a copper amalgam filling.

Dr. Morgan: I have never done it myself, but it is frequently, lining the crown, however, with cement. Otherwise, the mercury in the amalgam would attack the gold and weaken it.

Dr. —— had an amalgam filling faced with gold six years ago, which is still in good condition.

Dr. Moffat: In the case I mentioned, if it was decided to crown it, would an amalgam filling in the cavity be advisable?

Dr. Morgan: An oxyphosphate filling would be preferable. As I said before, the amalgam in the filling would blend with the gold, to its injury.

Dr. T. C. West: I have a case which has given me trouble. A lady patient twenty-three or four years old, presented herself, some eighteen months ago, saying that her front teeth (which are all in good order) were beginning to overlap. The irregularity was so slight that I assured her it needed no attention. Six months later she came back with much more decided overlapping of the central incisors and one of them devitalized. I removed the nerve and found the end of the root absorbed, with a large open foramen, my instrument going right through. I did the best I could in filling it with gutta percha, but it laps very much now. It does not give give any pain, though she cannot bite on it.

Dr. Morgan: Nature indicates very plainly that it will soon be removed. But why do you say that the root was absorbed? Perhaps there was never any more there.

Dr. West: I cannot say about that, but it had never been drilled or filled.

Dr. Morgan: In one case I had occasion to make an application of arsenic, in order to fill the root canal. A quarter of an inch from the crown I reached living tissue. I took the tooth out and found that the roots were not a quarter of an inch long.

Dr. West: In a patient fifty years old I extracted the central incisors, because of recession of the gums. The roots were not more than a quarter of an inch long, but well rounded at the apex, with living pulps.

Subject passed.

On motion of Dr. West, adjourned to eight o'clock P. M.

EVENING SESSION.

The President in the Chair.

The application for membership of Dr. W. H. Guess, Water Valley, was received, duly recommended by the committee. He was duly elected.

Prof. Francis Peabody, Louisville, read a paper entitled "The Conservative Treatment of Teeth by the Gold Process." (See page 208.)

Dr. Crenshaw, Atlanta, was called upon to open the discussion.

Dr. Crenshaw: The subject of filling teeth is always of interest to us, as it constitutes so large a portion of what we are called upon to do for our patients. The paper read is conservative and quite correct in many of its positions.

But it would be impossible for a paper to meet the views of all. I grant that teeth can be saved with non-cohesive gold; but the manner in which it is stated in the paper is a sort of indirect attack upon the employment of cohesive gold. Hammering upon the surface of a filling will not make it hug to the walls of the cavity if it has not been made to hug them as he goes; it cannot be made to hug the walls after the filling has reached a certain point. If a mat of gold is made, it must be made to hug the walls as fast as it nears them. It cannot be done from the surface of the mat. A large proportion of cavities can only be perfectly filled with cohesive gold, and done in one half the time that similar work, if possible at all, could be done with non-cohesive gold, no matter in whose hands.

Nothing but cohesive gold can restore incisors that are wasted on the palatine surface and cutting edge, when the gold has to be begun on one side and carried over the edges on to the other side. It cannot be done with non-cohesive gold used as such. It will not preserve such teeth if not cohesive. I agree entirely that soft, chalky teeth should not be filled with gold. I believe there is some therapeutic action when tin foil is put against the walls of such teeth. The amalgam alloys are indispensable. There is a man in our town who says that teeth should never be filled with amalgam alloys, but always with cohesive gold. There could be no worse mistake than to make such statements and stick to them. I believe our friend, Dr. Morgan, will testify that amalgam will preserve teeth. I believe with Dr. Flagg, that in proportion as teeth need to be saved, gold is the poorest materal for them. Yet there are sometimes cases where, in deference to our patients, we are obliged to fill teeth of open, soft structure with gold, though it is against our best judgment to do so. In all posterior cavities I would use amalgam properly manipulated. The cements are good only for temporary work.

In the main, I regard Dr. Peabody's paper a most interesting one, as anything on this subject must always be.

Dr. W. H. Morgan: I would like to ask if any gentleman here can tell me when gold foil was first introduced into this country or in Europe. Who first used gold foil, and when and where was it used? I do not know that we have any positive information on this subject. When Eleazar Parmly was in England, as a young man, he saw in the office of Leonard Kæcker, dentist to the last George, a beautiful gold filling on the coronal surface of a lower tooth, in the mouth of an old gentleman who said it had been put there forty years before, by Dr. Waite; that Dr. Waite had said to him at the time, "If you live forty years you will say, 'Blessed be Waite," and he did feel like saying "Blessed be Waite," for all these forty years.

Eleazar Parmly had great success in Europe. He had operated for the Royal family of Russia, and had been offered the equivalent of the rank of Colonel in the Russian army if he would remain in that country. But he preferred to come back to the United States, from his love of republican government.

The paper read is very admirable in many respects, and covers the ground completely. It is, however, open to criticism on some points. I disagree with the writer as to the propriety of using gold in soft teeth. In my own experience I have never seen any teeth that failed because filled with gold. I never saw them break down without feeling satisfied that with any other filling material they would have failed just the same, except with the cements, which are more closely allied to tooth structure; but I never hesitate to

use gold in soft or so-called chalky teeth. Last week I could have shown you gold fillings in the mouth of a lady now fifty or fifty-one years old, that when she was fifteen years old were separated and filled on their proximal surfaces, and which are now good teeth, but which were then very soft. I could give you a large number of cases of the same character, in my own practice and that of my partner, of many years ago. Forty years ago I separated and filled cavities on the proximate surfaces of teeth for children not ten years old, that are now good teeth. I use soft foil in soft teeth, though gold, whether soft or cohesive, is the same thing chemically.

Failure is not the result of want of harmony or of incompatibility, but the fault lies in manipulation. He who uses non-cohesive gold will have a larger proportion of success than he who uses cohe-The manner of introduction of the gold is a frequent cause of failure. Injudicious malletting breaks down the margins and beats them into powder. Much also depends on the manner of shaping cavities, especially in the proximal surfaces of molars and bicuspids. Where there is considerable undercut at the cervical walls, the tubuli are cut across and the outer portions receive no nutriment, and consequently lose their vitality; thin flanges break down more readily than rounded surfaces. Sharp edges succumb in the same way as the corners of a square piece of timber crumble off, leaving rounded surfaces. I have never accepted the theory that there is any therapeutic quality in tin to prevent margins from disintegrating. Tin does not neutralize acids; they have no action whatever on it, and there is no evidence that tin or any of its combinations possess antiseptic properties. This has never even been suggested by chemists. But it is soft and easily adapted, and its introduction does not powder the sharp edges; yet fillings of tin do fail at the cervical margins. I had a case recently where a filling that was one-half tin, had failed at the cervical margin. It is more difficult to fill a cavity entirely full with cohesive gold than with noncohesive, because it has a tendency to draw away from the walls. Burnishing down at the margins excludes the enemy and preserves the tooth, but it does not fill the cavity. All gold can be made cohesive by annealing, but it should never be annealed over the flame of al spirit lamp. If wood alcohol is used the gold will be greatly impaired and made really non-cohesive.

Dr. George W. Rembert: Is that theory or fact?

Dr. Morgan: It is a fact.

Dr. Rembert: I have not found it so in my experience.

Dr. Morgan: If your gold is put in the oven of a cooking stove and heated to two hundred and twelve degrees, you will get no fumes, but will drain off all surface impurities, and make your gold cohesive; or, you can put it in a saucer in front of the fire. It is not true that it is necessary to keep the cavity and your gold absolutely dry. If the mouth is moderately healthy, there is no disintegrating quality in the oral fluids, and no harm will be done. When it is impossible to control the flow of saliva, and we do meet with such cases, what might almost be called sub-marine fillings can be successfully made. Use your gold twisted into a soft rope, using from one end to the other till it is all used up. Test the solidity of the filling by introducing a wedge-shaped instrument, and where you can puncture fill in the hole with a smaller rope. filling is well condensed on the surface and at the margins it makes no difference if the interior of the mass is so soft that you can stick a pencil into it. The fillings of old Dr. Gardette, of Philadelphia, if large, were all soft at the bottom. Those of Van Kamp were always soft and loose within. The enemy approaches from the out-In cavities with thin walls, as in the bicuspids, if large fillings are made very dense and hard, the unequal expansion of the metal and tooth substance may split the tooth in two.

Dr. Geo. W. Rembert: I do not agree as to the causes of failure at the cervical margins. These same points were made, in a similar discussion, ten years ago. The cervical margin is a common point for failure, but it is not because of cutting across the tubuli. Failure is no more general in dead teeth than in live teeth. If we are to expect failure when the tubuli are cut across, then all our work would fail. As to wood alcohol in the lamp impairing the cohesiveness of gold, that has not been my experience. Mississippi druggists cannot sell alcohol in quantity, consequently I get rectified spirits from a dealer in spirits and use it in my annealing lamps with no bad results.

(TO BE CONTINUED IN NEXT ISSUE.)

[&]quot;In cases of accidental exposure of the pulp in excavation of a cavity of decay," says Dr. Van Der Paut, "apply morphia and dilute carbolic acid, or creosote, with a dust of iodol, and then proceed to cap and insert a temporary filling. This is usually attended with success in young and healthy patients.

MISCELLANEOUS AND SELECTED.

WE can prepare root canals better in one hour than we can in twenty; we have been over-treating the root-canal; we have been depending upon medicines and our theories to do a great deal that we could have done by mechanical skill and force.—E. L. Clifford.

The ideal rubber plate, for general use and practice, is undoubtedly the gold-lined plate of the Daly method, or its equivalent. In this we have all the advantages of pure gold, and it is worth while to consider if pure gold here is not better than the ordinary 18 karat of which most swaged plates are made, in contact with the tissues; and this lining, smooth and solid as a swaged plate, and yet as perfectly adapted to the surface as the rubber.—J. B. Hodgkin.

AN EXPLOSIVE POWDER.—Chlorate of Potash and Tannin are favorite drugs with many dental practitioners. We may therefore draw attention to a letter written to the *Chemist and Druggist*, in which the correspondent warned others of the danger which he himself encountered. A dentist ordered two drachms of chlorate of potash and one drachm of taunin, and when these were mixed together in a mortar there was an explosion.—*British Journal*.

DR. CHAS. B. ATKINSON says that a twenty-five per cent. pyrozone, ethereal solution, is probably the best bleacher for teeth that has ever been offered. Its effect is exceedingly prompt and the results are permanent. The process is not attended with pain unless the gums be touched, when a severe pricking sensation is produced, and a coagulum seems to form in most cases; but this will return to a normal condition if not abraded. He also recommends it in treating abscess pockets and suppurating pyorrhea alveolaris.

WE are often led to suppose that pyorrhoea has not yet attacked a specified tooth, because pressure will not force an escape of pus around the neck. I am satisfied now that many such seemingly healthy individual teeth, in diseased mouths, are affected, for I have been amazed to observe the free flow of pus in such cases immediately upon the application of caustic pyrozone.—R. Ottolengui.

DR. GEORGE BEERS believes that the careless use of arsenic often contributes in no small degree to the death of pulps in adjacent teeth.

RECENT experiments conducted at the Pasteur Institute, in Paris, have shown that drinking water may be completely freed of cholera bacilli by the addition of fifteen grains of citric acid to a quart of water. As citric acid is an acid of lemon juice, it would appear that strong lemonade would answer the purpose equally well.—Good Health.

COME TO OUR ARMS!—The Dental Review says, "Dental colleges are like individuals, careful or slovenly, just as they happen to be manned or officered. A great improvement could be made in various portions of the country if colleges were endowed."

Many colleges stand with open arms, ready to receive endowments to almost any number of hundred thousand, and will not be particular who the donors are, either; and we guarantee that all who have donations to make can be accommodated.

SEVERE BUT TRUE.—In ignorance and carelessness dentists have begun to challenge drug clerks. The action of a tooth-extractor in Flemingsburg, Ky., who caused the death of a woman by injecting blood-poisoning matter into her gums, is a case in point. The evils in this line come from the pretence of dentists to be able to pull teeth without causing pain, and the disposition of patients to take all sorts of chances in order to escape suffering agony. People should understand that a perfect pain-deadener is seldom administered in perfect safety.—Cincinnati Commercial Gazette.

WHY IT FAILED.—The Indiana dentists tried to get an amend ment to their present dental law giving the State Board power to examine all applicants for registration, but it was defeated, 47 to 39, at the present session of the Legislature. Regarding its defeat a correspondent writes us thus: "We were defeated by the rabid howling of a backwoods numbskull who afterwards acknowledged that he had never read the statutes, but thought that we were trying to create a State Board and get up a monopoly. Such is life."

Yes, such is the life of many a man in the Legislatures of the various States, and this is exactly the treatment you may expect from them; yet the people vote them into these responsible positions. Spot such men, and if they are again in the political race let the dentists combine and use their utmost influence to shut them out.

THE

Southern Dental Journal and Luminary.

A MONTHLY PUBLICATION

DEVOTED TO THE INTEREST OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. Johnson, 306 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to Drs. W. R. Holmes & Mason, 556 Mulberry St., Macon, Ga.

Editorial.

IS THE PRACTICE OF DENTISTRY MORE DISAGREEA-BLE THAN OTHER OCCUPATIONS!

If you will take a tour of dental offices and sympathizingly draw out the various proprietors found therein into a personal conversation, and listen to their various tales of woe and descriptions of numerous trials, temptations and difficulties encountered, I am afraid the conclusion will be that there is no other occupation under the sun that has so many disagreeable features, is so routine, confining and wearing on one's entire physical existence.

Now, there are a great many dentists who really and conscientiously think this, and in consequence thereof learn to almost hate their profession, drop into a rut and practice it simply for the pitiable fees obtained, wishing all the time they had entered into the practice of medicine, mercantile life or something else—anything, in fact, except what they are doing. These conclusions are erroneous, and it is a great pity that such men should have obtained entrance into the folds of such a great and grand profession. Such men have grown selfish, have shut themselves out from the world, form conclusions based on imaginative facts and are unable to make just comparisons.

Dentistry, when practiced successfully, is as free from worry and responsibility as any profession or occupation of which I know. Let us make a few comparisons. Take the practitioner of medicine, for instance: He never lies down at night knowing that he can sleep

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the whole night through without being disturbed; it matters not what the state of the weather may be, he must go when called; there is hardly a day but he has the responsibility of the life of a human being on his hands; he encounters nervous and hysterical people as well as we; some find fault because he gives too much medicine, others claim he does not give enough; some say he comes too often, others that he does not come enough; a child dies, and the sorrowing, hysterical mother, devoid of reason from long nights of watching, brands him a heartless murderer for life; he must be cheerful in cases of melancholia, sorrowful and sympathetic around the death bed. Look into his face and you see the lines of care deeply furrowed in his cheeks and brow. Would I exchange my occupation for his? No! A thousand times, no.

Lawyers have their troubles and responsibilities. Talk to them about it. Their lives are not all sunshine. Merchants have immense sums of money invested in goods of fluctuating and unstable prices; expensive business houses rented; clerks to pay and be worried with, and their success or failure depends largely upon the market quotations and financial state of the country. They may be rich to-day and in the hands of a receiver to-morrow. Think this is all done without worry? No, indeed; I would not exchange places with him.

The ambitious seeker after public office, has a fine salaried position to-day, to-morrow he is thrown on the cold charities of the world, without any occupation whatever.

These are occupations on an equal with ours. Then look beneath you and make a few comparisons and you will go back to your office and thank God that he has given you one of the easiest, most pleasant and delightful means of obtaining a livelihood of all others which have lain within your reach. It is true the practice of dentistry has its difficulties, trials and annoyances, and is no royal road to wealth, but there is no business that is free from these, and it is better that it is so. A man is not a man who has never had cares or surmounted obstacles. I love dentistry, and I love it more and more every day, and I know of no position or occupation I would accept in its stead.

DENTAL SECTIONS IN MEDICAL CONGRESSES.—A section of odontology has now become a permanent department of international medical congresses, and whatever may be the character of future medical congresses, a section devoted to dentistry is likely to become a permanent feature of every international medical congress.



EXEMPTION OF DENTISTS FROM JURY DUTY.

"Wyoming seems to have been in advance in this important movement. We copy the following from a private letter received from Dr. R. J. Gardinier, of Laramie, Wyoming:

"'I see by one of the late dental journals that the point is being agitated of exempting dentists from jury duty (and rightly so). Wyoming is somewhat ahead in this line, at least. In the year 1885, when our Territorial laws were in the hands of the committee to be compiled, I presented the claims of dentists for exemption so strongly and satisfactorily, that my wish was granted; so that dentists were included as exempt from jury duty."

The above, clipped from an exchange, is news to me, as I have been under the impression that dentists, in all the States alike, were exempt from jury duty. In the discussions in the Mississippi Society, a few weeks ago, I notice that some of the members complain of having to do jury duty. Georgia has never required dentists to do jury duty, and I feel sure that the profession, in all the States, could be exempted if the proper steps were taken. The various State societies should take the matter up for consideration, and have the law so changed.

Physicians are exempted because their services are liable to be required at an unexpected moment for the preservation of life or relief of suffering. Patients of dentists have the same right to require the services of a dentist when needed, and only a little effort would be required to have the laws so changed.

LAYMAN, the deaf mute bur-sharpener, seems yet to be roaming over the country, seeking victims. Since Dr. S. B. Barfield's letter of warning went out to the public, complaints have reached us from various quarters.

Dr. Benj. Simons, of Charleston, S. C., was the last we have heard of who fell a prey to his slick tricks. He gave his name there as Cay, and said he was a member of a firm in Atlanta known as the Southern Dental Manufacturing Co. Dr. Simons gave him a lot of pluggers to repair, and would now feel thankful for their return as they were. The dental press should give notices, so that the scoundrel might be apprehended and brought to justice.

Dr. W. W. Allport, one of the early pioneers of dentistry, a well known and useful man, died at his home in Chicago, March 21st, aged 69. One by one the old lights go out.

TO OUR PATRONS AND FRIENDS.

It is with great pleasure and satisfaction that I am enabled to announce that satisfactory and substantial arrangements have been entered into that will place the SOUTHERN DENTAL JOURNAL on a more firm foundation than it has occupied for some years past.

The JOURNAL has had a hard struggle during the last two years just past, and but for the substantial aid of a few of its old friends, who have stuck to it through adversity, might have suspended publication altogether.

Realizing the importance of a representative dental journal in the South, Drs. W. R. Holmes and J. M. Mason, the new publishers, with that true philanthropic spirit characteristic of these gentlemen, have consented to take hold of the Journal and consolidate it with the Dental Luminary, under the name of the Southern Dental Journal and Luminary. Neither time, money nor effort will be spared on the part of the editor or publishers to bring this new publication up to a high standard of excellence. The Journal is now a fixture and a certainty, and all that is needed to make it one of the first dental publications in the land is the hearty and earnest co-operation of the profession in the South, and this we feel certain we will get.

Drs. Holmes & Mason have been before the profession so long as dealers in dental goods and editors and publishers of the Dental Luminary, that introductory or eulogistic words from me are not necessary. Their former success in all of their undertakings is sufficient proof of what will be the outcome of this present venture.

The policy of the JOURNAL will be about the same as heretofore. It will be published in the interest of and for the advancement of dental science generally, and particularly Southern dentistry. It will be kept up to a high ethical standard, and will be conducted as harmoniously as possible.

We invite and solicit correspondence, incidents of office practice, or short articles of any kind, at any time, for publication, when they are intended as articles that are likely to be of interest to the readers of the JOURNAL or for the advancement of dentistry; but nothing of a cutting or wrangling nature that would be likely to disturb the harmony of the profession, will be allowed in its pages. The name and address of the writer will be required by the editor before any article will be printed.

I desire to extend my warmest thanks to the subscribers, advertisers, friends and patrons of the JOURNAL for their encouragement

and support, while conducting it as editor and publisher, and wish to assure them that they will be most benefited by the new arrangement. Asking a continuation of the same for the new management, I am faithfully.

H. HERBERT JOHNSON, D. D. S.

At the meeting of the North Carolina State Dental Society, at Raleigh, May 23d, there will be some fine exhibits of dental goods. The S. S. White Dental Manufacturing Co. will be there with a display from their live Atlanta branch. The Wilmington Company will also make a beautiful display at the same time. Perhaps others; these we know of.

These exhibits help the meetings and should be encouraged. It costs these companies a large outlay to make these displays, but it enables the dentists in remote sections, away from the large cities and dental depots, to see all the latest appliances and additions to dental science, and I hope they will be properly appreciated by the societies.

Another dental college for Atlanta is the latest. Chicago is a little ahead yet, but Atlanta is gaining, and if the supply of professors holds out, there is no telling what may develop later on.

THE American Dental Association has changed its time of meeting, as will be seen by a communication from Dr. J. N. Crouse, in this issue. The Association will meet in Chicago, beginning August 12th.

I. HOPE the readers and patrons of the JOURNAL will be pleased with this issue. We have gone to considerable extra expense to make it presentable, and we are determined to keep it up to a high standard. Help us all you can.

THE North Carolina State Dental Society meets in Raleigh at 10 o'clock, Tuesday, May 23d. Do not forget the date.

[&]quot;WHEN a large, open apical foramen is present," says Dr. Miller, "it may be advisable to incorporate a little finely pulverized iodoform into the cement with which such canals should be filled, on account of its beneficial action on the tissue about the end of the root."

Correspondence.

THE WORLD'S COLUMBIAN DENTAL CONGRESS.

SPECIAL NOTICE.

IOWA CITY, IOWA, April 12th, 1893.

To the Officers of Dental Societies in the United States and Foreign Countries:

GENTLEMEN.—The Committees on Membership and Registration of the World's Columbian Dental Congress will be saved much trouble and the applicants for membership much vexation if the members of Dental Societies in good standing are furnished with credentials or certificates of membership so that they may be presented at the desk where intending members apply for their membership cards.

Advance membership cards will be furnished on application to the Secretary of the General Executive Committee or the Secretary-General of the Congress, when the membership fee (\$10.00) accompanies the application.

A. O. HUNT,

Sec'y of the Gen'l Executive Committee, Iowa City, Iowa.

A. W. HARLAN, Sec'y Gen'l of the Congress, No. 1000 Masonic Temple, Chicago, Ill.

CHICAGO, April 17, 1893.

Editor of the Southern Dental Journal, Macon, Ga.:

DEAR DOCTOR—Owing to a change in the time of meeting of the World's Columbian Dental Congress, it seemed a necessity to make a change in the time of meeting of the American Dental Association, and at the request of the officers of both the American Dental Association and the World's Columbian Dental Congress, I communicated with the officers of the former, and the vote was unanimous for changing the time of meeting of the American Dental Association.

Accordingly, we give notice that the meeting of the American Dental Association will be held in Chicago, August 12, instead of August 15.

By order of the Executive Committee.

J. N. CROUSE, Chairman.

COLUMBIA DENTAL CLUB, CHICAGO.

Editor Southern Dental Journal:

The dentists of Chicago have organized the Columbia Dental Clubfor the entertainment of dentists visiting Chicago during the continuance of the Exposition. They have rented the entire house at 300 Michigan avenue (about four squares from the art palace on the lake front), and it will be kept open daily for the convenience of dentists.

The Club will be used as headquarters for the World's Columbian Dental Congress during the month of August, and perhaps after July 15, 1893.

Dentists who contemplate a visit to Chicago may have their letters addressed in care of the Club. Members of the profession in Michigan, Illinois, Indiana, Wisconsin, Iowa, Missouri and Kentucky are invited to send pictures, bric-a-brac and curios to embellish the rooms. Everything of value will be returned to the owners after the Exposition closes.

The profession in Illinois will furnish the Club House, and those who contribute fifteen dollars (\$15.00) will be entitled to a full paid non-assessible membership for the six months.

On behalf of the organizers,

A. W. HARLAN,
Secretary-General World's Columbian Dental Congress.

CHICAGO, April 28, 1893.

Editor Southern Dental Journal:

The graduating exercises of the Northwestern University Dental School were held on the afternoon of April 25, at Central Music Hall, Chicago.

Six students were graduated, as follows: Benjamin Merrill Ford, Jared Michael Gorman, Charles Hazel Gale, Murry Gordon Matte-'son, Philip Albert Pyper, Charles Arthur Templeton.

Yours truly,

E. Noyes, Secretary.

Dr. A. E. Matteson uses equal parts of plaster of Paris and hard coal ashes as an investment for gold work.

A sore eye baffled the skill of an occulist for a long time. The removal of a fistulous eye-tooth cured the eye.



SOCIETIES.

THE PAN-AMERICAN MEDICAL CONGRESS.

CINCINNATI, O., January 31, 1893.

To the Dental Profession of the Western Continent:

The Pan-American Medical Congress to meet in Washington, D. C., September 5 to 8, 1893, being an assured success, the Dental Section promises to be well represented.

No other section of the congress can claim a greater number of men of scientific attainment. In artistic and mechanical skill, in accurate and delicate manipulation, where surgery is involved, in bacteriology and histology and rapid progress in its specialty, no other surpasses that of the Dental profession. Able papers on the following subjects will attest the above assertion: Cleft Palate, Harelip, Orthodontia, Dental Anatomy, Histology, and Pathology; new growths of every character pertaining to the mouth and teeth; diseases of the maxillary sinus and alveolar processes, Periostitis, Pulpitis and their results; Operative Dentistry, Bacteriology, Mechanical Dentistry, in addition to many other suitable topics.

This congress, being an outgrowth of the American Medical Association, the requirements for membership in this section are identical with that of the A. M. A., viz: Any reputable practitioner holding the title of D. D. S. or M. D. S., can become a member the same as if he possessed the M. D.

To members of the profession in our sister countries, we extend a hearty invitation to visit us and participate in the meeting, either by writing papers or by being present to hear or discuss them. This is especially desirable since the congress belongs equally to all American countries. Many of you will, no doubt, visit the great. World's Fair. This is also the year for the World's Columbian Dental Congress in Chicago. This meeting, however, in no way interferes with the P. A. M. C., since the Columbian comes August 14 to 19, inclusive, and the P. A. M. C. September 5 to 8, inclusive, in Washington, thus offering two attractions in the way of scientific dentistry in addition to the great fair. Many of the officers of one congress are officially connected with the other.

To the Columbian you are an invited guest; at the Pan-American you are participating in an institution as much your own as ours.

To the dental profession in the United States we would suggest that, in taking part in this the first meeting of the P. A. M. C., we are the hosts, and our duties as such need not be rehearsed.

The excess of dental practitioners in the United States over our sister countries will necessitate a careful selection of topics and and papers, in order to present the highest standard, the object being not numbers, but quality of material and ample time for discussion.

The social feature of the congress will be no small part of the attractions. Respectfully,

M. H. FLETCHER, K. P.,

Executive President of the Section on Oral and Dental Surgery of the P. A. M. C.

RECENT PATENTS.

A list of recent patents, reported specially for the trade, by W. E. Aughinbaugh, patent attorney, Washington, D. C. Copies of these patents may be had of the above named attorney at twenty-cents each.

493,289. Attachment for Dental Engines; Adelbert H. Peck and Clarence E. Allshouse, Chicago, Ill. Filed November 27, 1891.

493,318. Artificial Tooth; Joshua M. Twilley, Dover, Del. Filed January 12, 1893.

493,379. Dental Chair; Aaron P. Gould, Canton, Ohio. Filed March 16, 1889.

493,431. Electric Motor for Dental Work; Jeremiah Keller, Canton, Ohio. Filed June 6, 1892.

493,528. Box for Tooth Powder; Warren A. Spalding, New Haven, Conn. Filed July 18, 1892.

493,723. Dental Appliance for Obtunding Nerves; William P. Horton, Jr., Cleveland, Ohio, assignor of one-half to Ansel B. Jones, same place. Filed August 18, 1892.

493,800. Dental Plate; John R. Watson, Smithville, Pa. Filed October 7, 1890.

493,843. Dental Plate; Johannes A. A. Schoondermark, Leeuwarden, Netherlands. Filed July 5, 1892.

493,846. Dental Boring Apparatus; James Weber and Hugo Hampel, Berlin, Germany, assignors of one-half to Joseph Davidsohn, same place. Filed January 4, 1892. Patented in Germany March 4, 1891.

493,893. Dental Disk Holder; Newton Morgan, Springfield, Mass. Filed December 19, 1892.

494,065. Artificial Tooth Plate; Gustav A. Juterbock, Berlin, Germany, assignor to Carl Otto Juterbock, Penge, England. Filed December 21, 1892.

494,227. Dental Plugger; Frank J. Richards, Williamsport, Pa. Filed June 30, 1892.

494,393. Artificial Tooth Plate. John C. Stapleton, Washington, D. C. Filed January 17, 1893.

MISSOURI STATE DENTAL ASSOCIATION.

The twenty-ninth annual meeting of the Missouri State Dental Association will be held at Excelsior Springs, Mo., July 11, 12, 13, 14, inclusive. All dentists are invited to attend, as the meeting promises to be of great value to the profession.

WM. CONRAD. 321 N. Grand Ave., St. Louis, Mo.

THE Georgia State Dental Society met in annual session at the Kimball House, in Atlanta, May 9th to 12th. The following officers were elected for the next year:

EXAMINING BOARD.—J. H. Coyle, Thomasville, Chairman; D. D. Atkinson, Brunswick, Secretary; B. H. Catching, Atlanta; A. G. Bouton, Savannah; H. H. Johnson, Macon.

This is a medical and dental directory of the three States named above, and seems to be very complete. It is also a complete directory of the medical and dental societies of the United States, and contains as well much other useful and valuable information of like character relative to colleges and societies.

THE MEDICAL AND DENTAL REGISTER—DIRECTORY AND INTELLIGENCER of Penn. sylvania, New Jersey and Delaware. George Keil, editor. Philadelphia, 306 and 308 Chestnut street.

PUBLISHERS' ANNOUNCEMENT.

We take pleasure in announcing that with this number we have assumed charge of the publication of the Southern Dental Journal and Luminary. The Dental Luminary, which we have edited and published for the past fourteen years, has ceased to exist, as a separate publication. It has been consolidated with the Southern Dental Journal, and the two will be published under the name of the Southern Dental Journal and Luminary. It has been thought that, by combining the strength of the two journals, heretofore published separately and covering largely the same territory, a very excellent and thoroughly successful journal will result. Both journals have done good service for the advancement of dentistry in their respective spheres. The union will make them still more effective and useful.

We beg to return thanks to the many friends and supporters of the LUMINARY in the past, and solicit a kind consideration for the SOUTHERN DENTAL JOURNAL AND LUMINARY.

Dr. H. H. Johnson, who has been editing the SOUTHERN DENTAL JOURNAL, and who is so well and favorably known to the profession, will have charge of the Editorial Department.

Contributions, exchanges, books for review, and communications relating to the Editorial Department, should be addressed to Dr. H. H. Johnson, 306 Second Street, Macon, Ga.

Subscriptions, and communications relating to advertisements, must be addressed to Drs. W. R. Holmes & Mason, Macon, Ga.

Publishers of Journals will confer a favor by sending a copy of exchange to each department.

The Editorial Department will be managed in such a manner as to please the observing and reflecting dentist, and be worthy of his attention. We ask the support of every dentist in the South, and would be glad to have the name of each one on our subscription list.

The Southern Dental Journal and Luminary will be published in the highest typographical style, and will present advertisements to the very best advantage. The Journal will cover an extensive territory in the South, affording a most excellent advertising medium for manufacturers to reach the attention of dentists. We solicit a liberal patronage from manufacturers, and feel assured that good results will follow the investment.

W. R. HOLMES & MASON.

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Be assured of the genuine by prescribing an original package (14-oz. bottle) whenever practicable.

THE

Southern Dental Journal

AND LUMINARY.

Vol. XII.

Macon, Ga., June, 1, 1893.

No. 6.

Original.

A REVIEW OF THE STATUS OF DENTISTRY.*

BY DR. C. W. ROBINSON, MAGNOLIA, MISS.

MR. PRESIDENT.—What is the status of dentistry in the State of Mississippi, under its present laws? Is it a profession, or is it a trade? Are we specialists of medicine and surgery? Are we mechanics, or, are we nondescripts, placed here upon the earth to serve "God and the Devil," alike, with no fixed home with either? I am constrained to make these queries in view of the following facts:

At its session, held in the City of Richmond, Va., in 1878, the American Medical Association (the highest medical authority in the United States) then and there declared by unanimous vote that dentistry was a specialty of medicine and surgery, and that all dentists practicing under diploma from any reputable college of dentistry was entitled to all the rights, benefits and privileges derived from their Association by doctors of medicine, thus demonstrating the importance of this branch of surgery; and, to follow up this principle, we find at the present day many of the medical colleges throughout the Union have adopted their dental department, with a full corps of teachers, where the student of dentistry shares alike

^{*}Read before the Mississippi State Dental Society, April, 1893.

with the student of medicine in all that pertains to either, without distinction or discrimination, while the professors of medicine, surgery and dentistry go hand in hand, marching steadily forward to the tune of advancement in science and art, the civil law making no distinction.

Such, Mr. President, is the status of dentistry throughout a majority of the States of the Union. How does it appear in this great State of Mississippi?

By comparing the laws governing the practice of medicine with that of dentistry we find a marked discrimination in favor of the former, which, I think, is alike unjust, humiliating and inconsistent, as, for example, a young man comes into the State, fresh from his *Alma Mater*, armed with a diploma entitling him to the degree of D. D. S. This document he prizes as the apple of his eye, for it has cost him many weeks, months, and, perhaps, years of patient, weary toil and study to obtain it. Is he permitted by law to practice under this credential?

Are the signatures of those learned and honored professors, attached under the great seal of his college, taken as sufficient guarantee of his fitness to practice? No. That document which he has striven so hard to obtain, and which he supposed (in his verdancy) was the open sesame to fame and fortune, is ignored as so much worthless paper. He is required to present himself before a board, created by the law-making power of the State, to undergo a rigid examination as to his learning and proficiency in-what? science of manipulating precious metals? The art of restoring a lost tooth crown? The mechanism by which a beautiful artificial denture is made? The process of hardening rubber, etc.? he extent of his examination? If so, why not include the silversmith, the carpenter, and the iron-worker! No; his examination takes a higher scope, and includes most of those studies of medicine required of the M. D., which qualify him to cope with disease. Why?

Because the law (thus far) regards the dentist in the light of a physician, proficient in these studies which make them competent to prescribe medicine, perform surgery, or give advice by which a diseased part of the body may be restored to health, and the public protected against charlatanism. (And I might here remark that the ignorance displayed by the average physician regarding diseases of the teeth, their treatment, and their relation to general health is simply appalling.) But now mark the inconsistency of law. Whilst the physician and the dentist are alike required to practice

under certificates granted by their respective State boards (paying the same fees therefor), the physician is, by reason of his profession. exempt from the payment of privilege tax or licenses of whatever nature, except his certificate, while the "dentist," though armed with a certificate from his board, is politely requested to walk up to the captain's office and settle his privilege tax like all other tradesmen and mechanics, because the law now places him in that category . by including the word dentist upon the list of those liable to taxation, while that of physician is absent. In short, the authorities of law have, like the historical old negro, "sot de trap in de middle ob de path, so's to catch de coon (dentist) either a comin' or a gwine." Again, we find upon the statute books that all physicians in actual practice, by reason of their calling, shall be exempt from serving as jurors in courts of law, but not one word as to the exemption of dentists, which makes them clearly liable, unless, through the courtesy of the court, they are excused. Thus you see, while the M. D. sits quietly in his luxuriant sanctum sanctorum, enjoying the cool breezes and a fragrant Havana, or rides over the country visiting his patients at will, snapping his fingers at courts of law, the office of the D. D. S. is closed or turned over to an assistant. his patients left to endure, as best they can, the pangs of aching teeth, whilst he, the poor D. D. S., is in charge of a bailiff, locked up in a dirty, ill-ventilated jury room of some county court, wrestling manfully with the all-absorbing and momentous question as to whether "Sambo killed the hog or did it die a natural death."

Now, may I ask, is this right? Is it honorable? Is it just? • In my humble judgment, no. We are either specialists of surgery and medicine or we are mechanics. If the former, by virtue of the diploma which we hold as doctors of dental surgery, we are justly entitled to all the rights and privileges, under the law, enjoyed by the doctor of medicine. If the latter, then our diplomas are worthless pieces of parchment, and the suffix D. D. S. is without meaning, and should be discarded, the State board of examiners abolished as superfluous, allowing each individual practitioner a "go-as-you-please" race in the field of mechanism, to seek such distinction as his skill and talents may allow. But, sir, I believe it a duty which we owe to ourselves as individuals, to this association as dentists, to the profession at large, wheresoever dispersed, that we, as an association, earnestly insist that the Attorney General of the State construe the law and define our status under the law, and, should the learned gentleman, in his opinion, decide that we are mechanics or tradesmen, subject to the laws governing those bodies, then, in my humble opinion, we should memorialize our Legislature to enact such laws as will place the doctors of dental surgery upon the same plane as the doctor of medicine. When that is accomplished, then, and not until then, will the D. D. S. command the same deference, consideration and respect as the M. D.

THREE NEW REMEDIAL PREPARATIONS.*

BY DR. W. E. WALKER, BAY ST. LOUIS, MISS.

Among the many new discoveries there are three in materia medica which enables us to employ oxygen and iron in better form than ever before. I have reference to pyrozone, Weld's syrup of iron chloride, and the bi-palatinoids.

There is probably no one here who has not learned from trying experience the extreme unreliability of peroxide of hydrogen. Not withstanding all our care in guarding against change of temperature, exposure to light, etc., we too often find our *stock-bottle* of no more value than so much clear water.

McKesson & Robbins, of New York, now offer us, in the three grades of pyrozone, reliable, stable preparations of oxygen in solution of exact strength, which, in the grade indicated by conditions, will be found very valuable in the diagnosis of pus and in the treatment of ulcerations—internal or external—in dental abscesses, pyorrhæa alveolaris, necrosis, in bleaching teeth, as a cleanser, a disinfectant or as a hemostatic.

These preparations have been thoroughly tested, and their value attested to by such reliable men as Drs. Ottolengui, Bodecker, Chas. B. Atkinson, M. L. Rhein and others. What I have to say is based upon their published records, partially confirmed in my own experience.

Pyrozone is manufactured in three grades: (1) medicinal pyrozone, 3 per cent. or 15 volume aqueous solution of hydrogen peroxide; (2) antiseptic pyrozone, a 5 per cent. solution in ether, and (3) caustic pyrozone, a 25 per cent. etherial solution.

(1) Medicinal pyrozone has about the same range as peroxide of hydrogen, but with the advantage of absolute stability and exact strength. It is a rapidly-acting, non-toxic, non-acid, odorless antiseptic and pus destroyer. Injected into abscesses, or sprayed upon

^{*}Read before the Mississippi State Dental Society, April, 1893.

ulcerating surfaces, it decomposes pus with great rapidity, causing instant effervescence, bubbling and frothing as long as any pus or extraneous organic matter remains. It is also a good bleacher, though less penetrating than the stronger grades. When it is desired to be absolutely aseptic, Dr. Rhein dissolved 1\frac{3}{3} grains mercuric bichloride in 2 ounces pyrozone, 3 per cent., which can be used to great advantage in cleansing septic root canals. Being non-toxic, medicinal pyrozone may safely be freely used as a mouth wash.

- Dr. C. B. Atkinson considers it of special value in the treatment of teeth with pitted or wasted enamel, as it both bleaches the teeth and retards the destructive work of dental decay. In regard to its stability, Dr. Rhein says "it does not seem to lose its stability after any length of time."
- (2) Antiseptic pyrozone, a 5 per cent. solution H² O² in ether, is a more powerful antiseptic, which acts on pus with great energy, the rapid evaporation of ether leaving the concentrated H2 O2 behind. It is very useful in removing the green and brown stains about the necks of children's teeth, and in bleaching teeth, applying it on a pledget of cotton. If the soft tissues are accidentally touched, apparent coagulation occurs, but the tissues soon resume their natural color, with no eschar or slough and no permanent change of tissue. This 5 per cent. solution is of great value in sterilizing about bridges and crowns, the rapid evaporation of the ether aiding in procuring the perfect dryness so essential in using the soft cements. also be used to spray cavities of decay when ready for filling, sterilizing and drying the cavity at the same time. It is also valuable as a spray on ulcerating surfaces, apthous patches, congested fauces, etc. Great care must be taken not to allow it to touch an exposed pulp. as it expands the tissue and would cause severe pain.

It must be borne in mind that pyrozone is death to all extraneous organic matter, whether as pus or in a flow of venous blood, contact with either of which will produce some degree of effervessence and froth. It is an absolute indicator of pus; then only after the territory has been bathed and rinsed and made clean. Subsequent effervessence may then be considered an indication of pus.

(3) The 25 percent pyrozone is pronounced by Dr. Charles B. Atkinson "probably the best bleacher of teeth that has ever been offered." He says: "Its effect is exceedingly prompt, and the results are permanent." In deep pockets of pyorrhœa-alveolaris a small tent wet with the 25 per cent. will, in most cases, terminate the suppuration. Is also valuable in root canals with putrescent pulps. In using the caustic grade care should be taken that no excess oozes

from the tampon. Any excess should be removed by bibulous paper. Tannin and glycerine will relieve the pain and burning caused by accidental action upon healthy soft tissues. This burning is more severe on healthy than upon diseased tissue.

Of Weld's syrup of iron chloride (1 fluid ounce=24 m. tri. ch. iron, officinal), I will only say that in this palatable preparation the disastrous effects of the tincture of chloride of iron upon the teeth have been practically overcome, the free acid being neutralized, while the therapeutic value is unimpaired. It is easily assimilated, does not derange the stomach nor produce nausea or disagreeable eructations. It will not injure the enamel of the teeth, though a slight stain, similar to that made by soft-boiled eggs, may be produced. It is not really a syrup in the usual sense.

Another easily administered form of iron is found in the bipalatinoids of the New York Quinine and Cnemical works.

In this form, the agents to be combined are contained in the two halves of a double convex capsule, but kept apart by a soluble airtight partition until the capsule is dissolved in the stomach, when chemical reaction takes place.

In the ferrous carbonate bi-palatinoid, for instance, one grain of pure powdered dessicated sulphate of iron and two-third grains carbonate of soda are enclosed each in an air-tight compartment of the double capsule. When this is dissolved in the stomach molecular reaction takes place, and the green ferrous carbonate results, the chemical form of iron most easily absorbed by the system. Dr. Chas. B. Atkinson considers this method of administering iron tonics far superior to any liquid preparation. Various other combinations of iron are furnished.

THEY DIDN'T FILL TEETH.

There is a prevalent idea that filled teeth have been found in the mouths of Egyptian mummies. It is true that Herodotus says there were "physicians for the teeth" among the Egyptians of his day, but there is no evidence that they attempted the salvation of teeth by filling. No such instance has ever been presented. Artificial substitutes have been found, which were usually human teeth, held in place by means of gold wires or bands, and extraction and cleaning of the teeth were done; but that plugging as a prophylactic measure was ever a practice there is no proof to establish.— Exchange.

"CHEMISTRY."

Mr. President and Gentlemen:

Chemistry treats of the composition of bodies and the specific properties of matter—Natural Science, Physical Science. For instance, water consists of two gases—hydrogen and oxygen. Now, there is a positiveness, or certainty, whenever these two elements meet in a proper ratio, and the result is, inevitably, water. So this certainty of results is what goes to form the fundamental principles of chemistry, and places it beside, or abreast, of the positive sciences of this day and time.

Now, phrenology and physiognomy are both wanting in this particular, and up to date, for the want of truth, fundamental principles fail to formulate a basis, or foundation, upon which to build, and thus falls short of attaining the name, reputation or even principle of a perfect science.

While there are pet theories in chemistry, as in almost all other sciences, as a result of man's visionary imagination, still there are enough demonstrated facts fully established in chemistry to found one of the most perfect and at the same time most important sciences of to-day; and I am sorry that I am unable to give you a paper worthy of the subject.

To be a perfect chemist, practically speaking, would demand not only all of one's time, but all of his labor. We are therefore, as dentists, not expected to be practical chemists, who should know somethings of its teachings, and especially dental chemistry.

Do not understand me to say that chemistry is not wanted or needed in our profession. Far from it. I think that dentistry, as a profession, would be more perfect if we were all chemists, but this is not the case, and in our day and time will never be. But let us do "the best we can, and in doing this we will do" well, and greatly benefit our calling.

There are two great classes of chemical substances: the one organic, the other inorganic. The organic is always the result of life force, vis vitalis, and may be either animal or vegetable. The other is simply found inert in nature, and far exceeds in proportion the former. Flesh and wood fitly represent the first class, while sand, glass and the metals represent the second class.

Now, all substances of both classes claim as a starting point an atom. This is the smallest imaginable particle of any substance, and is indivisible and at the same time indestructible. These atoms,

in all the elements which they go to form are equal in size and weight, when reduced to a gaseous state, and thus is established the beautiful theory of atomic weights.

- 1st. That each element is composed of indivisible atoms, which are exactly equal in size and weight.
- 2d. That the atomic weights represent the relative weights of the atoms of various kinds.
- 3d. That compounds are formed by the union of atoms of different kinds, in the proportion of their atomic weights or multiples of them.
- 4th. That the molecular weight of a compound is equal to the sum of atomic weights of its elements.

Now, a molecule is next in size to an atom, and is formed of one or more atoms.* Yet in some of the elementary substances the atom and molecule are the same, but more generally it takes two or more atoms to form a molecule, and this combination of atoms into molecules goes to form the elements proper. Then, what is an element? An element is a kind of matter, a product of nature, which exists in its original state, and has thus never been broken up or separated into other substances.

For instance, gold, silver, zinc, tin, sulphur, oxygen, hydrogen, nitrogen, and, in fact, 64 to 97, are found in nature up to date. Now, in these elements we have two great classes, the one metals, the other non-metals. Fifty-one of the first, thirteen of the latter; and while this division is not so clearly defined, yet for general use we may claim it perfect. As a few of the first class we mention sodium, calcium, strontium and barium, iron, gold, silver, zinc, lead. Among the second, oxygen, hydrogen, nitrogen, carbon, bromine, iodine, boron, silicon, etc.

In chemistry we have a nomenclature by which each element is known. This nomenclature is taken from the name of the element or from some peculiarity, when, from the name, the first letter represents the element unless confusion arises from two or more elements commencing with the same letter. In this case a second letter is added, or the Latin name chosen in one case, from which to take the first or two first letters. O. for oxygen, al. for aluminum, cu. for copper or cuprum, cl. for clonne, named from green color; br. bromine, from bad odor, etc.

Now, if you will notice, the ending um calls for a metal as in sodium, potassium, barium, cadmium, etc., while similarity of

^{*} Mon-atomic, de-atomic, tri-atomic, teter-atomic, hex-atomic.



ending in non-metallic elements indicate some analogy, as on in boron, silicon, or ine in bromine, iodine. For the beginner to remember these endings is almost a knowledge of a difference between the metals and non-metals wherever seen. This nomenclature, for "brevity, the soul of wit," is reduced to short-hand, or a symbol system, and the same rule in part applied. The first letter of the English name is taken generally as the symbol of an element. When this produces confusion the Latin name is applied; when this conflicts, the second letter is added. C. is for carbon, so it is of chlorine. To avoid confusion, we just add 1. to c., for chlo-S. is the first letter for silver, and so it is for silicon. avoid confusion add the Latin name argentum to silver: take first two letters. This leaves si. for silicon, and s., alone, for sulphur. To remember these points, which are seldom plainly laid down in text-books, relieves the memory of quite a task, and helps the student wonderfully.

We mention further, that wherever you find a symbol, it represents one, two, or more of a distinct atom, and when you find two or more symbols you find two or more different atoms, and may look for a compound.

For instance, mg. is the symbol for magnesium. In this instance, uncombined, we know it is an element, and ending with um indicates a metal. Now, add carbonic acid gas, mg. co³ we have magnesium carbonate, a compound, and, with the water, forms the simple basis of epsom salt.

So a symbol alone is an element, representing one or more of a special atom. Combined, it is a compound, and the ending indicates the class.

Now, we have, first, the atom, or starting point of the chemist; second, the molecule, or starting point of the philosopher. Molecules go to form the elements, while the elements go to form the compounds. If more than one atom is used in forming the molecule of a compound, it is simply shown by writing below the symbol the number, as H² O indicates that there are two atoms of H and one of O in the compound, water.

Now, just here we ask, what is a chemical compound? It is a combination of elements, in the form of atomic molecules, in certain and definite proportions to unite and form a third substance unlike either of those which originally enter into the make-up of the compound.

For instance, yellow sulphur and white quicksilver, when combined, produce a chemical substance unlike either of the two in

color, consistency, weight, or mechanical properties, red vermilion, of which nothing surpasses in corrosive qualities.

Again, inert charcoal, with nitrogen and hydrogen, produces the deadly poison prussic acid, while solid black charcoal and yellow sulphur make a colorless fluid. Poisonous and offensive chlorine combines with that brilliant metal, sodium, and forms common salt.

There is a God-given force in chemistry which accounts for all of this. It causes the various elements of matter to unite and form new compounds ad infinitum. This force acts at distances so slight as to be insensible, and upon the most dissimilar substances. In fact, the more dissimilar, the stronger the union. Now, this force produces new substances by driving the elements of a compound without the range of old attractions and within that of new ones, and is termed chemical affinity.

Now, there is something to me peculiar just here. There is nothing in the nature of an element which indicates its chemical affinity, and it is only by trial and proper circumstances that we can tell with, and in what proportions, one element will combine with another. This fact is what makes chemistry a life-long labor for truth and light, and one of the endless experimental sciences. This attraction is not a mere freak of nature, but a God-given force imparted to matter for a wise and beneficent purpose. We know that certain agencies favor chemical action, and frequently develop an affinity where it seemed to be wanting. For instance, heat, light, solution.

Now there is a vast difference between chemical and physical combination and natural and simple combination. This accounts for the incompatibilities, natural and physical, which in prescriptions will frequently throw down a precipitate or produce another substance different in character and properties.

A simple compound or mixture is where we have several ingredients together in powder or solution, no one having chemism for the other, and thus all remaining in close proximity yet retaining their original properties.

A chemical compound is where we have two or more ingredients in combination and the proximity or simple contact results in affinity, one for the other, to form a third substance unlike either of the original substances or components.

Now, of what advantage is this chemical affinity to life, either animal or vegetable? We will see. As before stated, there are, up to date, from sixty to seventy elements found in nature. Many of these are actually necessary to the growth and maintenance of the body. Still we cannot utilize them as found in nature.

We need phosphorus for the nervous system, but we cannot eat it for it is deadly poison. We need iron for the blood, but who could masticate iron in a natural state? We need calcium for the bones; it is not only indigestible but inorganic, and we can make no use of inorganic substances as found in nature, for the sustenance of the body. We need oxygen and hydrogen, but uncombined they would destroy life. We need carbon, but a diamond is too valuable, and charcoal too indigestible for common diet.

So if we were shut up with every element in nature at our disposal, we would either poison ourselves or actually starve to death.

We thus find that these elements must in a manner be prepared before we can use them to sustain life.

So chemical affinity is at work through the agencies of the vegetable and animal kingdom, as great laboratories of nature for the benefit of man.

We see that in the plant, the sunbeams of heaven decomposes the poisonous carbonic acid gas, and furnishes in return the lifegiving oxygen, drawing from the sun with that God-given force, heat for our bodies, which we could never do. It not only draws this heat, but actually stores it up for man's use at pleasure. We see too, that the plant changes the inorganic matter to organic matter, making it not only digestable, but palatable. They take carbon, hydrogen and oxygen, and transform them into wood, starch and sugar, vinegar and alcohol, and in fact, all that we eat, all that we drink, all that we wear, is the product of affinity through this great vegetable laboratory of nature. Each tiny leaf, each clinging vine, each shrub, each flower, each tree, the little heath-bell upon the common, the vast oak of the forest is unceasingly at work for man. Silent, yet grand these unseen forces speak in thunder tones; the greatness, the grandeur, and the glory of God.

Now animals have no power to produce organic matter, but only to consume it. Thus the deoxidation of carbonic acid and water, together with the combinations of their remaining elements to form organic matter or materials, is left alone, and can only be accomplished by the force of the living tissue of green vegetables. Nor does this chemical force stop here in either power of force, or importance.

It is said that God gives man the materials and the possibilities, and that he must work out for himself and establish the way and usage of anything for his good.

This wise provision, this gap in actual knowledge is what has made man the king of creation in intellect. If these elements we

find in nature had been given man in their various combination, there would have been no place in nature for progressive chemistry, and if these had been given with a receipt for the use of each combination, man would have had no honor or part in the developments of materia medica, or therepeutics.

But this beneficent wisdom gave the elements and then fashioned a mind and gave it to man, with a peculiar instinct of development, and thus he has worked out and instituted the science of which we treat. So to-day, as a reward for man's labor there is a remedy for almost every ill, and an abundance of food, drink and raiment.

Now, as before stated, few of these elements, gave happy results to either life, happiness or health in their natural state, but with a general knowledge of chemical affinity man has taken oxygen and hydrogen, and from their combining powers with other elements, has furnished the various father acids and bases, and the action of these, one upon the other, have produced the soluble salts of pharmacy, and thus prepared them for the use of man.

Take for instance the element zinc. What could we do with that metal as found in nature as a medicinal Gold, lead, and the various vegetable substances which are more or less inert even as an alkaloid base. So chemistry, with its power and force has done, and is doing much to-day to lengthen out the life of man and add happiness in declining years. The more we, as dentists, know of this wonderful science the better prepared we will be to meet the growing demands of our profession.

If I have, in any way interested, instructed, or established a new zeal for the study of dental chemistry, this paper has fulfilled its intention.

A FOREIGN BODY REMOVED BY THE "POTATO TREAT-MENT."

Dr. J. Solis Cohen reports, in the Philadelphia *Medical News*, that a patient was brought to him several hours after having swallowed an irregularly shaped dental clasp. Exploration of the œsophagus showed that tube to be unobstructed. The patient was ordered to be fed exclusively on buttered mashed and roasted potatoes, and to examine his stools carefully for the foreign body. Within forty-eight hours it was voided, thoroughly coated with potato.

PROCEEDINGS

OF THE

MISSISSIPPI STATE DENTAL ASSOCIATION,

NINETEENTH ANNUAL SESSION, HELD AT JACKSON, APRIL 5th, 6th, 7th, 1893.

[Reported for the Association by Mrs. J. M. Walker, Bay St. Louis.

(CONTINUED FROM MAY NUMBER:)

Dr. L. A. Smith, (Port Gibson,) wished to ask about the manipulation of amalgam, there is such a diversity of opinion as to the proper quantity of mercury to use.

Dr. Morgan replied that his general idea was to use the smallest possible amount. After amalgamating the metals he grinds it in a mortar. In copper alloy, make it just sufficiently soft to retain its form. If an excess of mercury is used the filling will never get hard, but will blacken at the margins and give way in a few months. He would not undertake to say positively, however. In riding hobbies it is very easy to get astride very gracefully, but it is not so easy to dismount. At this point Dr. Morgan intimated rather pointedly that Dr. Peabody's hobby was soft foil.

Dr. Peabody: I claim to be eclectic. If I ever rode a hobby I never knew it. The things that are impossible are very rare in America. He said that while it was undoubtedly true that cohesive gold would save the teeth when properly used, in the proper place, it was also true non-cohesive gold would do it better and the work be done in half the time. We should choose that which will accomplish the best results in the shortest time. He said: "My experience with gold in soft, chalky teeth has not been that of Dr. Morgan. Where the teeth are of that character which is attacked by white decay, gold will not save them, nor anything else but the phosphates. is no greater lack of harmony in soft foil than in cohesive, but the baser metals harmonize better with teeth of poor structure than gold. Tin is best in approximal cavities, especially in the superior bicuspid teeth, which are continually bathed in saliva; tin neutralizes the acids and prevents decay. I am satisfied of this from my Approximal cavities in bicuspids that have been own experience. in service for twenty-five years are as perfect now as when put in. Where there is no attrition, if properly packed, decay will not recur as it would under gold, no matter by whom it was put in. In the old style of filling, when two-thirds of the tooth was cut away in order to save the other third, gold might answer, but to-day we use the separator and shape our fillings so as to leave the natural interdental space, and the teeth comes together again in normal position, except that we have substituted gold at the point of contact, but we have not sawed out a V shaped space.

The drawing away of a gold filling from the walls of a cavity was spoken of. This will be inevitable if the filling is allowed to rise higher at the sides than in the center; but if it is kept highest in the center it cannot spring away from the sides.

In regard to cutting off the tubuli, a dead tooth will not last as long as a live tooth. You will hear men say that a tooth without a pulp is just as good as ever after the work of the pulp is done. The work of the pulp is never done, and the vitality of a tooth should be preserved as long as possible.

In the employment of soft gold three principles are involved: 1st. The wedge, as when cylinders are used; 2d. By the mechanical interlocking of its particles. 3d. By the cohesion of molecules. Fillings made forty years ago, before cohesive foil was known, are better than any that can be made now, though the surface was flat, and not contoured as is done to-day.

In regard to amalgams, and the question of Dr. Smith, I have a patient for whom, fifteen years ago, I filled a bicuspid that was very badly decayed down to the cervical margin. I look at that tooth every year in astonishment, and wish I knew how I did it; whether my success was due to the character of the tooth or to my manipulation. It is claimed by some that if an undue amount of mercury is used, we get a solution of tin, and on squeezing it out the original constituents are changed. My own experience has taught me how to put in just enough mercury to have a plastic mass, and not have any to squeeze out. It is then in better condition than if too soft, or if in a more powdery form."

Subject passed

The Secretary read a communication addressed to the Committee on Dental Literature, announcing the fourth edition of Letters from a Mother to Mothers on the Care of Children's Teeth—a thoroughly revised edition, brought up to date, and with additional illustrations, to be issued in very attractive form.

On motion, adjourned to 8 P. M.

FIRST DAY-NIGHT SESSION.

Called to order at eight P. M., the President in the Chair.

The application for membership of Dr. C. W. Robinson, Magnolia, having been duly acted upon by the committee, he was duly elected. Also, Drs. L. W. Worsham, Corinth, and Dr. W. L. Jones, Jackson.

The Committee on the President's Annual Address reported as follows:

REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS.

We, the committee, to whom the President's Address was referred, report as follows: After carefully reading the address we find it to be an admirable paper, and some suggestions made in the same we consider of very great importance to us as professional men, and worthy of the consideration of the Association. The suggestions to which we refer are as follows:

1st. To that portion in which he touches on professional ethics, and calls attention to Sections 2, 3 and 5, of our Code.

2d. To the creating of a Committee on Grievances and Complaints, to whom all complaints must be referred before being brought before the Association.

3d. To the organization of local societies.

4th. To the calling of attention to the World's Columbian Dental Congress to meet in Chicago in August next, from which, if we will but attend, we will reap untold benefits; and we would urge and beg every dentist in our State who can possibly do so, to avail himself of the opportunity to be on hand, to see what has been done to advance our profession in other countries as well as our own.

Respectfully submitted,

J. B. ASKEW,

I. B. REMBERT,

T. C. WEST,

Committee.

Dr. Geo. B. Clement endorsed the President's address. He hoped that the Committee on Grievances would be made a permanent one, to stand for a year, at least.

After some further discussion the paper was passed.

Dr. J. B. Askew read the following communication:

Mr. President and Gentlemen of the Mississippi State Dental Association:

In the interest of peace and harmony, I hereby tender my resignation as a member of the Mississippi State Dental Association.

Signed

A. H. HILZIM.



Dr. Geo. B. Clement moved that the resignation of Dr. A. H. Hilzim be accepted. The motion having been seconded, Dr. Geo. W. Rembert said:

"I am not opposed to accepting this resignation, but I think that the wording 'in the interests of peace and harmony' calls for an explanation."

Dr. J. B. Askew: In the absence of Dr. Hilzim, I will offer this explanation. Understanding that there was some talk of charges being brought against him, some matters having been laid before the Committee on Grievances, Dr. Hilzim tenders this, his resignation.

Dr. W. H. Morgan: I regret to see matters of this kind come up. We ought to bear and forbear. I learn that in Texas a convention has been called to organize a second Dental Association, which shall not be bound by the code of ethics. There are a large number of adventurers in that State, and they wish to lower the standard of ethics. That is a step on the down grade. In view of that fact, I feel like cautioning my Mississippi friends not to be too radical. Go slowly. When a gentleman has for many years been found worthy of the highest positions in the Association and the Board, be slow in allowing him to withdraw.

Dr. Geo. B. Clement: The committee offered Dr. Hilzim the opportunity of presenting his side of the question, but he merely sent in his resignation, preferring to have it accepted rather than have the subject discussed. Dr. Hilzim is not on trial for any offences. No charges have been brought before this body. He simply wishes to resign. I call for the question.

A standing vote being called for, the resignation was accepted by a vote of 13 to 2.

The resignation of Dr. O. B. Hilzim was also tendered and accepted.

Dr. J. B. Askew: Understanding that imputations have been cast of "crookedness" in regard to the passage of the recent dental law which gives such general dissatisfaction to the profession, I will state that I made every endeavor to ascertain whether legislation had been influenced as charged. I employed a lawyer and learned that not a single dentist in the State had anything to do with it. It is entirely the work of the codifiers of the laws who desired to simplify the old law. Some members have been very sore in the matter, feeling that they have been under a cloud. I hope nothing more of this kind will be said.

- Dr. Geo. B. Clement said that he had seen one of the codifiers who assured him that no dentist had had anything to do with it, except that Dr. Hilzim had secured the omission of the requirement of a meeting of the Board in November in addition to the April meeting.
- Dr. J. H. Magruder stated that he had heard that change made after the bill had passed the House.

On motion, the subject was passed, and Dr. C. W. Robinson, Magnolia, read a paper. (See page 253.)

- Dr. J. B. Askew: No man can add one word to that paper. I move a vote of thanks to Dr. Robinson for this very timely paper.
- Dr. T. O. Payne: I would suggest the appointment of a Committee on Legislation, the chairman of which shall reside in Jackson.
 - Dr. W. E. Walker: Make it a standing committee.
- Dr. Morgan: Such a committee could at once confer with the Attorney General on many points, as for instance, whether surgery does not include dental surgery.
- Dr. Geo. W. Rembert would have the committee authorized to frame a bill placing dentistry on the same plane with medicine, and report the same to the Association at the next meeting.

The subject of dentists serving on the jury was discussed at some length.

- Dr. Peabody said that having been summoned in Kentucky, he appealed to the Judge who looked up the law and decided that as a surgeon he was exempt.
- Dr. W. H. Morgan said the same decision had been given in his own case in Tennessee.
- Dr. W. T. Martin said that the Judge gave a decision in his favor based on a decision of the Supreme Court, that dentistry was a specialty of medicine.
- Dr. W. E. Walker said that he had never been summoned himself, but that his father, Dr. J. R. Walker had never served, having simply stated when summoned that he was "exempt by law," and his statement had never been questioned.
- Dr. J. B. Askew said that his experience had been very different. He had been summoned, and though he made the best speech of his life in trying to get off, he had been forced to sit for a week on a negro jury with only one other white man.
 - Dr. C. W. Robinson said he had to serve when summoned.

2

Dr. W. H. Morgan inquired if the Association were a chartered body!

After some discussion, Dr. Geo. W. Rembert said he was surprised that so important a matter had not been looked after before, as they were now without any protection in certain directions. Dr. Rembert then offered the following resolutions, which were adopted:

"That the Committee on Dental Legislation be appointed to obtain a charter for the Association.

"That a committee of five be appointed on Dental Legislation; that the Committee first have the Attorney General to construe the present law, and afterwards to frame a bill to be submitted to the Association at its next meeting, eliminating the several objectionable features of the existing law."

At a subsequent session the following Committee on Legislation and Charter was appointed:

Dr. I. B. Rembert, Jackson, chairman; Drs. Askew, Martin, Luckie and Robinson.

On motion of Dr. Askew, Drs. Marshall and Clement were added to the committee.

On motion, adjourned to 8 A. M. Friday, Thursday being set aside for clinics.

THIRD DAY-MORNING SESSION.

Called to order at 9 A. M., the President in the Chair.

The Treasurer requested all having bills against the Association to present the same to the Finance Committee for approval.

ROLL CALL OF MEMBERS HAVING UNPAID DUES.

Dr. W. H. Marshall read those portions of the Constitution and By-Laws having reference to dues.

Dr. L. G. Nisbet read the resolution passed at a previous meeting to the effect that all members in arrears over three years be dropped from the roll. Action on this resolution was suspended at the last meeting, but it is still in force.

The Secretary stated that a personal letter had been written to every member in arrears to the amount of three year's dues, but that no replies had been received, and not a dollar collected, though one member so notified had paid up in full at the last meeting.

Dr. W. H. Marshall moved that members in arrears for over five dollars be reinstated in good standing on payment of five dollars.

Dr. J. B. Rembert said that would encourage any member to let his dues accumulate for any number of years, knowing that he could at any time free himself of indebtedness on payment of five dollars.

Dr. L. A. Smith was opposed to the resolution. A member who might not be able to attend the meeting could easily remit his dues.

Dr. Moffat: Members who are so dropped can come in again at any time as new members on payment of the initiation fee and one year's dues—five dollars.

Dr. ———: Not unless recommended by the Committee on Membership, and a member so dropped would probably not be recommended.

Dr. Geo. W. Rembert: I would not sanction any action that would place a premium on non-payment of dues. I would oppose any such lack of promptitude in the small matter of \$2.00. How are we to meet the expenses of our meetings if men are to be allowed all the privileges and desire all the benefit, and pay nothing for it. It is the fault of the individual, not of the Association if dues have accumulated.

Dr. J. B. Askew: There is much to be said on both sides of the question. We cannot deny the logic of those who argue business principles, but we must also look at the humanitarian side. As a matter of policy, too, we should straighten these matters up with as little friction as possible. If we suspend a man, and reinstate him for five dollars he feels that he is enjoying a privilege. But if we drop him, he feels that he has been harshly treated and he don't come back. We have been running in a slip-shod sort of a way. Our friend, Dr. Morgan, has just awakened us to the fact that we have no Charter, a matter of the first importance, and yet we claim to be men of intelligence. Working for twelve or fifteen years without a Charter; absolutely without protection in the eyes of the law.

Dr. Moffat: Our Secretary, Dr. Walker, notified every member in arrears, and got not a dollar in reply.

On motion, it was resolved that the suspension of the resolution was out of order, and that all those owing three year's dues shall be dropped from the roll.

The Secretary was instructed to notify all such members that their names had been erased from the roll, and also to invite them to come in again as new members.

The application for membership of Dr. D. M. Gathin (Ellisville) having been approved by the committee, he was duly elected.

A paper from Dr. W. E. Walker, entitled "Three New Remedial Preparations," was read and discussed in the absence of Dr.

Walker, he being engaged on the Board of Dental Examiners. (For this paper see page 256 this issue).

Dr. W. H. Morgan was asked to open the discussion of this paper. He said: I have but little to say about these preparations. I was never carried away by the peroxide craze. I have never experienced the results reported by others. The fact has been brought out that if there is pus about the alveolus, effervescence is the result of sulphuric acid; pure peroxide of hydrogen produces no effervescence and is not a destroyer of pus. When that statement was published, the manufacturers only replied: "That gentleman is not up in the literature of his profession." I have not used the article mentioned in the paper, (pyrozone) but if it is a stable preparation it is preferable to the peroxide, because we all know how readily the latter parts with oxygen, and it is soon no better than water. The writer called attention to other conditions, that it was necessary to cleanse the surface by a spray before applying pyrozone, I will say that a strong spray of clear water will, in itself, cleanse an ulcerated surface as can be done by no other means. If there is sulphuric acid in this preparation, then it is unreliable, as other component parts may be dissolved and effervesce where there is no pus. It will be a valuable remedy from its power of penetration if it does remove the discoloration of dentine, for it would be taken up in the tubuli and reach the debris. The removal of green stains by peroxide of hydrogen is due to the sulphuric acid it contains which is set free. One point made is an evident mistakethat it is positively destructive to bacterial life. Professor Miller, of Berlin, has shown that there is nothing that will absolutely destroy bacterial life. Even in the mercurial preparations they kick about, though weakly. Carbolic acid is the most valuable remedy in this line, as it is an active coagulant. I have stood by it through thick and thin, and our leading men are now falling back upon it. Through its power of coagulation it prevents all decomposition. The paper is worthy of attention, and deserves a place in our literature. It is an eminently creditable paper. Some day I hope to see it in print, as it requires investigation and study; then I may have more to say about it. Pyrozone may terminate suppuration, but so will any preparation that has sulphuric acid in it.

Dr. W. T. Martin: Dr. Kirk has suggested recently that we get the valuable properties of oxygen in sodium peroxide Na² O². Care must be taken in making the solution of a given strength or great heat will be produced. Introduced in a pus-secreting surface we get a combination, and common salt is formed. This agent is more safely handled than pyrozone, as it is not caustic. It makes no eschar; does not destroy tissues. I have not used it sufficiently to be able to verify his observations, but he claims for it all the good effects attributed to pyrozone. On soft tissues it produces a white spot like a burn, but it passes away in a few hours. It is hydroscopic, and must be kept guarded from the atmosphere, or it is soon destroyed. It is true that Dr Miller proves that we have no known germ destroyer. But if we can prevent their action by destroying the food on which they live, so that they will die, it is a matter of little importance what kills them.

Dr. Morgan wished to give a word of caution in injecting these remedies where they would be confined, as the most agonizing pain would be produced if the remedy is confined during effervescence. There will be an immediate puffing up, and great pain from pressure. If there is a fistulous opening affording ready outlet that is all right, but be very cautious about injecting it into an enclosed sac. If Dr. Martin meant what he said, he is wrong in theory, and harm will result if he is followed. There are no "pus-producing surfaces." We used to talk about pyogenic membranes, but there is no such thing; pus is not a secretion.

Dr. Fr. Peabody: At Niagara I made some statements about the effects of iodoform vapor. Later, when eight or ten of us were together at the hotel, I got severely "sat down upon." I said: "What do you suppose would happen to me if I made the statement that peroxide of hydrogen has no disinfectant properties. suppose you would say I was a fit subject for a lunatic asylum. I do not propose to say it, but I believe it is true." I do not believe that peroxide of hydrogen ever destroyed pus. It is neither a disinfectant nor a germicide. Where there is no indication of pus we get the same effervescence from mucus or from venous blood—the same as from a pocket of pus. It is no proof of pus in the pockets. I think the mind of the dental profession is not clear on the distinction between antiseptics and disinfectants. We place great reliance on certain agents; then we drop them for something new, but we return to our first love, carbolic acid. Last year here, at Lookout, and at Niagara, I took some pains to set forth the value of iodoform vapor. I had investigated it with great care. Some said it was not an antiseptic-not a disinfectant. But if you put an antiseptic in the pockets bacteria keeps away. If you put in a disinfectant you destroy them.

It is true there is no medicine that will kill the spores—the ova. They must be hatched before you can kill them. You take a child that has a filthy nurse, and you find the child's head full of lice. There are many applications that will kill the lice, but no applications that you can make will kill the ova—the nits; but after they are hatched you can kill them in half an instant, and so you ultimately destroy them all.

Dr. Hunt: I have not tried pyrozone. I received from Parke, Davis & Company a bottle of Weld's Syrup of Iron Chloride. read the literature which accompanied it with care and interest. They desired me to test it. I prepared a small bottle of equal parts of the chloride of iron and water, and placed a perfect tooth in it. A cloudy precipitation formed around the tooth, but there was no decalcification of the enamel. I then put another tooth in a bottle of the full strength, chloride of iron. In twelve hours there was such a heavy cloudiness that I could not see the tooth in the bottle. and I found the enamel very much roughened. In twenty-four hours more the enamel at the gingival margin had disappeared. In twenty-four hours more the enamel was off in spots on the buccal and lingual surfaces. It is still in soak during my absence. I expect to give Parke. Davis & Company the results. One of the most frequent troubles we encounter is the effects of the chloride of iron on teeth. I had one patient whose teeth I frequently examined, but off of whom I never made a dollar. Finally she got sick, and was given chloride of iron through a glass tube. After her recovery she came to me with three teeth so decalcified that the pulps were exposed, and the teeth aching. All of her teeth were more or less affected. Physicians fail to warn their patients to wash the mouth and teeth with alkaline washes to neutralize the hydrochloric acid and prevent its injurious effects upon the teeth. It cannot be kept off with a tube. I think Dr. Morgan's statement that it is sulphuric acid in peroxide of hydrogen, is an error. I feel quite positive that it is hydrochloric acid.

Dr. Mergan: It has been generally observed that all the preparations of iron which are reduced by acids have a deleterious effect upon the teeth. Possibly it is hydrochloric acid. I think Prof. Peabody a little mixed on antiseptics and disinfectants. Antiseptics arrest decomposition; disinfectants destroy the products of decomposition. I have taken a good deal of pains to investigate this subject, and questioned Dr. Sudduth in public to draw out his definitions. As to iodoform, Prof. Miller has demonstrated that a pulpmay be enveloped in it, and yet bacteria will be moving all over it. I saw Prof. Peabody exhibit his little apparatus for injecting the tubuli, and it is true he did produce disinfection, and arrest decom-

position, but the ordinary tincture of iodine will produce the same results, though not so rapidly, as with his little machine. I have a tooth here which I treated before I left home—putting tincture of iodine in the cavity. I then ground it down. The color has faded some, but you can see where it penetrated the dentine. And so, perhaps, we had better use the clean tincture and not disgust our patients with the indescribable odor of iodoform.

Dr. L. D. Carpenter, Atlanta, Ga., being present, was elected to honorary membership, with the privilege of the floor, and invited to address the Association. He tendered the dentists of Mississippi a most cordial invitation to attend the meeting of the Georgia State Dental Society, in May. He said that he had not yet formed a definite opinion of the merits of these new remedies. He had tried pyrozone, and, so far, found it very satisfactory.

Subject passed.

The Secretary read a cordial invitation from the Alabama Dental Association, through the Secretary, Dr. S. W. Foster, to attend their annual meeting, at Birmingham, on the 2d Tuesday in April. The courtesy was duly acknowledged.

Dr. L. G. Nisbet: It is my sad duty to announce the death of one of our members since our last meeting—Dr. B. S. Davis, of Enterprise.

Dr. T. M. Martin: Dr. J. A. Watson, of Lexington, also departed this life some time ago.

The Chair appointed a Committee on Necrology, to prepare suitable resolutions.

Dr. Charles Ward was appointed a committee of one to get all the copies of the By-Laws and Code of Ethics now in the hands of Dr. Hilzim, and place them in the hands of the Secretary for distribution.

The election of officers being the next order of business,

Dr. R. K. Luckie said: No man has more at heart the interests of this Association and of the dental profession than Dr. James B. Askew, of Vicksburg. He was one of the first to start in the organization of this Association; its first Secretary and Treasurer, and its second President. I nominate Dr. J. B. Askew for President of this Association.

Dr. J. B. Askew: That was seventeen years ago. I did the best I could then, as I have done since, though in an humble way.

On motion of Dr. Luckie, the Secretary was instructed to cast the ballot of the entire Association for Dr. James B. Askew, of Vicksburg, as our next *President*.

Dr. Askew: Gentlemen, I assure you that I esteem this as the highest honor I could receive at your hands, and most entirely unlooked for. I scarcely know how to express my gratitude. I can only promise you to use my honest and warmest endeavors to fulfill the duties of this high and honorable office.

Dr. Geo. W. Rembert was elected First Vice-President.

Dr. J. O. Frilick, Meridian, and Dr. W. C. Stewart, Fayette, were elected Second and Third Vice-Presidents.

Dr. J. D. Killian, Greenville, was elected Corresponding Secretary.

Dr. T. C. West, Natchez, was elected Recording Secretary.

Dr. C. C. Crowder was unanimously re-elected Treasurer.

Drs. Rembert and Luckie conducted the President elect to the Chair.

Dr. Dillahay, the retiring President, introduced Dr. Askew to the Association as one who had held the flag, had stood by it, had battled for it, had been true to it and to us.

Dr. Askew responded briefly, and the Association adjourned to two o'clock P. M.

THIRD DAY—AFTERNOON SESSION.

The Association was called to order at half-past two o'clock P. M., the President, Dr. J. B. Askew, in the Chair.

Dr. Luckie moved that the President appoint three members to serve as a Standing Committee on Grievances.

The motion was seconded by Dr. Dillehay, and the President appointed Dr. R. K. Luckie, Holly Springs, Dr. A. A. Dillehay, Meridian, and Dr. W. H. Marshall, Oxford.

Dr. George B. Clement then read a paper on Chemistry.

(See page 259.)

The subject was then declared open for discussion.

Dr. W. H. Morgan: I am not a chemist, but I consider this a most excellently written paper.

Dr. W. H. Marshall: There is nothing in the paper on which to base a discussion. He has given us an array of established facts about which there cannot be two opinions.

Dr. Dillehay: Although I am not a chemist I consider that the consideration of this subject elevates man in his attitude towards his Creator, the giver of all good.

Subject passed.

Dr. W. E. Walker, Bay St. Louis, asked the privilege of the floor and said: During the present meeting of the State Board of Dental Examiners many things have been forced upon my attention, driving me to the conclusion that something is imperatively needed to bring about a greater degree of harmony between the different State Boards, and between the Boards and the Dental Colleges. We have our State Boards of Dental Examiners, and we have a National Board of Dental Examiners. What we now need is an

INTERSTATE BOARD OF DENTAL EXAMINERS.

Having been closely confined by my duties on our own Board, I have not liad time or opportunity to definitely mature a plan, but I would offer the following suggestions, that this Interstate Board, whose scope should be broad and liberal, should be composed of one delegate from each State.

EXAMINING BOARDS WHICH MIGHT ENTER INTO THIS COMPACT.

The object of this Board would be to so reconcile and harmonize the Boards of the different States that a license granted by this Interstate Board would entitle a man to a State license in any State of the Union, represented on this Board, without undergoing a fresh examination each time he might change his location.

The function of this Board would be to examine all applicants for an Interstate license, both in "learning" and in "skill," the standard to at least equal that required for graduation by the Colleges having the severest requirements, and with the exception of holders of State licenses none but graduates should be allowed to appear before the Interstate Boards.

A provision might be included which would entitle our best "old men" to an Interstate license without examination, provided they have held a State license for a period of at least five years, or, being properly endorsed, recommendation from their State Society and the existing State Board, if such has not been in existence for five years at the time of their application.

If this plan can be perfected and put into execution, a man could go before this Board while in his prime, and if he passes the examination, which shall always be up to the highest standard of professional attainment, he would receive a license which would entitle him to a State license in any of the States represented in the Interstate Board, ratifying the demands of the State law by going through the form of an examination, and paying the legal fee, the Interstate license being granted on what is really his final examination.

This would be but simple justice in the case, for instance, of an old man, who, on account of his own or his wife's health, might have to change from the seacoast to the mountains, or vice versa. He may be a skillful practitioner, and yet have grown rusty on theories. Family troubles or ill health may so perplex his mind that he would not be able to pass a strict Examining Board, and yet he might, by virtue of his long years in the profession, his practical experience, and perhaps brilliant attainments in earlier years, be well worthy of a State license, which would enable him to continue to practice his profession in his declining years.

Dr. George B. Clement, in the discussion of this subject, said: I have had some conversation with Dr. Walker about this idea, and I think it exceedingly suggestive. If a man stands his examination before his State Board and gets his license, and then for some cause wishes to locate in, perhaps, an adjoining State, just across the line, it ought not to be necessary for him immediately to pass another examination, with the additional expense and inconvenience. Dr. Walker's plan aims at the correction of this among other evils of our existing State laws.

Dr. Dillehay favored the idea.

Dr. W. H. Marshall: It is possible that some State laws would have to be amended, but some plan ought to be adopted by which a member in good standing in one State could be admitted to practice in another State.

Dr. Dillehay: As matters now stand, if men of such learning and attainments as Prof. Morgan or Prof. Peabody, desired to locate in our State, for any reason, they would have to undergo the same examination as a lot of raw college boys, with perhaps some of their own students on the Examining Board.

Dr. W. E. Walker: My plan is not yet fully matured, but I think it can be so arranged as to avoid any necessity for changing State laws. It is sometimes a troublesome thing to get laws changed. In the proposed Interstate Board all the States represented would be admitted on equal standing. In some of the States the law is inadequate and the Board too lenient. Alabama, for instance, which has a rigid Board, would not be willing to have a man holding a license from a Board where the requirements are almost nil, declared competent to come into Alabama and practice without any further preliminary. But if a man has such an Interstate license as I propose, (the details of which have yet to be perfected, for so far this is only suggestive) it would be proof that he is a good and competent man, and, as suggested by Dr. Dillehay, a mere formal acquaint-

ance, sufficient to comply with the letter of the law in any State, will be all that will be needed.

Dr. L. G. Nisbet: Such an Interstate license would be a passport in obtaining a State license. With the proper papers from this Interstate Board, he would merely pay the legal fee and go through the form of an examination. Mississippi, for instance, would have had a representative from her State Board on the Insterstate Board, who would know how he had stood the examination, and what his credentials were.

Dr. George B. Clement: I now move that a committee be appointed to investigate this matter and report before the close of this meeting of the Mississippi State Dental Association. We must have something to start on, and we would then be prepared to report at the meeting of the National Board at Chicago, this Summer. I would like to have the representatives of the Mississippi State Board go prepared to present the views of this Association on this great question before the National Board.

The Chair: This matter is rather deep to be brought up at such short notice.

Dr. Walker: It is a matter that has been forced upon my mind by what I have seen and learned in the present meeting of the State Board, but I have not had time or opportunity to thoroughly mature any definite plan in detail.

Prof. Peabody: Dr. Walker has presented a most admirable nucleus on which to build. There is something radically wrong in compelling a man to undergo a more than College examination in any State where he may go. He may have devoted a lifetime to the service of his profession, but may not have looked into text-books for years. We all forget those things of which we never make any practical use. A young man who has just gone through College is familiar with it all. There has been severe comment made on the action of your Southern States in requiring examination of even the holders of diplomas from our most reputable Colleges. It looks somewhat as if it was the desire and intention to keep out everybody else. Our profession is a liberal one, and we should eliminate everything that tends to benefit a chosen few.

Dr. Clement: If the Colleges only granted diplomas to students who are really capable in every respect, matters would be much simplified. Are all the branches taught the first year?

Dr. Peabody: In the first year the student is thoroughly grounded in the principles of anatomy, physiology and prosthetic dentistry. But a young freshman may have studied for several years under a preceptor, and be quite capable of answering all the examination questions. I have known a student who, after only one College course, would answer every question put to a graduating student. Any Examining Board would find him perfect in theory, but what does he know of practice? Nothing! And yet unless he has it practically at his finger ends, his knowledge is valueless to him, as far as practicing his profession goes. And so, what good does your Examining Board do, after all? It shows a man's capacity for mental acquisition, and nothing more. If the nucleus here presented can be so shaped up as to make examinations apply to practice as well as principles, to evidence the possession of skill as well as of knowledge, it will prove a most valuable thing, in my judgment.

Dr. W. H. Morgan: I like the spirit of this movement very The regulations between the Colleges and the Boards are not what they should be. They are not arranged in harmony vet. Everything that tends to harmonize them will be of benefit. The spirit of this movement is in the right direction. The Colleges try to meet the demands of the profession at large. We say to the Examining Boards, go ahead; put up your standard, and we will try to bring our students up to it. The Boards say, if your students were thoroughly prepared for their diplomas, we would gladly recognize them. Well, we try to bring them up to a reasonable standard, but it is hard to do even this. We do not get the proper material to work on. You say we ought to differentiate examine before registration; see that we have the right material; but this is impossible. A youngster comes to us and wishes to register. We ask, "What are your literary qualifications?" He presents a certificate from this Professor, a diploma from some High School or College, and we have to register him.

Again, a most unpromising specimen presents himself. He has, perhaps, been traveling all night, and comes right from the train; he is not tidy; he, perhaps, is fresh from the farm; has on a suit of jeans clothes made by his grand-mother when he was sixteen years old; his wrists protrude beyond his coatsleeves; his waist line is up near his shoulder blades. We conclude that he will be a very poky sort of man. But all that furnishes no just ground on which to refuse him entrance. But we soon notice that that same young man is always busy in the laboratory, or eagerly present at the infirmary; and just such a one as that bore off the founder's medal for the highest average examination. No, we cannot always differentiate. But we intend to bring our young men up if you do not go too fast; we intend to have our students pass right through. I

understand a young gentleman passed between 80 and 90, on one course of lectures. But he can only make a good plain filling. We have our students go into the infirmary and take hold of the operating instruments, towards the close of the first year, if capable, in the judgment of the Demonstrator.

Prof. Peabody: We do not allow them outside of the laboratory the first year. If the student is about to make a failure, we demand that the Demonstrator make it good. Operative dentistry is the most difficult branch; it is the keystone in dental practice, and we teach it from the beginning. We have all the appliances necessary to make them accomplished in that direction. To preserve the teeth, which is the one object in dentistry, they must fill teeth well.

Dr. W. H. Marshall: A few of us must leave on the next train, and we want to know where we are going to meet next year? I move that the subject be passed, the rules suspended, and that we go into the election of time and place.

On a ballot being taken, Natchez was unanimously selected, and first Tuesday the time of meeting.

Dr. Walker: If the Association meets in May, the members of the Board can all be present and have the benefit of the meeting of which they have been entirely deprived at this meeting.

Dr. Clement: I suggest that the Committee on Legislation work on the line of having the law so amended as to allow the Board to precede the Association all over the State.

Dr. L. G. Nisbet offered the following resolutions from the Committee on Necrology:

WHEREAS, in the Providence of God two of our brothers in the profession have been summoned from earth to their everlasting home, therefore

Resolved, That in the death of our brothers, Dr. J. A. Watson, of Lexington, and Dr. B. S. Davis of Enterprise, we sustain an irreparable loss.

Resolved, That this Association tender the most sincere sympathy to their respective families, trusting that God will give them comfort and strength to bear this inscrutable dispensation of His Providence.

Resolved, That a copy of these resolutions be spread upon our minutes and a copy of the same be sent to the bereaved families.

Respectfully,

L. G. NISBET, W. E. WALKER, D. M. GATLIN, Committee.

The Chair: The new Code requires some changes in our By-Laws. A new edition should be gotten out, and published in accordance with the Code.

Drs. Rembert and West were appointed a committee on revision of By-Laws.

Dr. T. B. Rembert: The notary will require \$5.00 to draft the Charter for the Association.

On motion, Dr. Rembert was authorized to draw on the Treasurer for the necessary amount to complete the work entrusted to them.

A resolution of thanks to the Spengler House and the railroads for reduced rates was adopted.

The report of the Treasurer was read as follows:

To balance from last meeting
\$182 90
To Dr. Dillehay, printing, stationery, circulars and invita-
tions
To Dr. F. H. Smith, Corresponding Secretary, printing, sta-
tionery, programmes, etc
To Dr. W. E. Walker, Recording Secretary, printing, sta-
tionery and purchase of books for Secretary's office 11 00
To Dr. Killian, material for clinic 1 00
To sundries
To Stuart & Adams, material for clinics 6 12
To Jas. Taylor
To Reporter
Balance on hand
C. C. CROWDER, Treasurer.
Agented

Accepted.

On motion, adjourned to meet at Natchez, first Tuesday in May, 1894.

CLINIC REPORT.

BY DR. ROBERT K. LUCKIE.

DR. W. H. MARSHALL, Oxford, Miss., demonstrated the value of his matrix in filling posterior cavities of bicuspids and molars with amalgam, and the best method of extracting all the mercury from the amalgam, that the filling might be polished immediately. The mercury is squeezed out by means of chamois skin and heavy pliers. Considerable pressure and rotary motion is used in condensation, and the fillings were polished at once.

DR. FRANCIS PEABODY, Louisville, Ky., filled a cavity on the labio-mesial surface of a superior left lateral incisor tooth, with soft non-cohesive gold, using the cylinder and interlocking process. The beautiful polish which the filling received was sufficient proof that the gold was well condensed.

DR. J. O. FRILICK, Meridian, Miss., made a bridge which consisted of hollow dummies, cementing in a porcelain inlay after completion of piece, thereby saving investment of the piece at any time during the construction, and enabling the dentist to repair it without its removal from the mouth. This bridge extended from the right inferior second bicuspid to second molar and is Dr. Frilick's own design.

Dr. A. A. DILLEHAY, Meridian, Miss., exhibited the Dillehay Dental Engine Plugger, which can be used on any hand piece or slip joint attachment. The instrument can be placed at any angle and has a right angle attachment. It has neither a spring nor a sag; and makes a direct or push stroke and is not larger than an ordinary hand piece.

DR. J. D. KILLIAN, Greenville, Miss., immediate root filling and gold crown. After drying and cleaning thoroughly, the pulp canal was thoroughly filled with dry iodoform, and then a heated platinum instrument was passed into the tooth root which liberated the iodoform in the form of vapor. The tooth being kept dry and hot instrument passed in several times until none of the iodoform could be seen, the canal was reamed out and filled with cement. The tooth was then properly shaped and crowned with the ordinary gold crown which he made himself and considered superior to seamless ready-made crown on account of a more correct adaptability. The tooth treated was a first superior bicuspid.

Dr. Geo. B. Clement, Macon, Miss., made and mounted a combination gold and platinum crown on lower molar. The crown was like any all gold crown, except the band was made of platinum, soldered with twenty karat gold. The cusps were made of gold, and the whole cemented with Briton's cement. The points claimed are:

First, more perfect adaptability by use of platinum band. Second, simplifying the process of soldering.

Third, the contrast of bright gold cusps with the dull gray platinum band, tones down and lessens the conspicuousness.

Dr. W. H. MORGAN, Nashville, Tenn., made himself interesting by giving oral clinics.

DR. WM. CRENSHAW, Atlanta, Ga., made a four crown gold bridge for Dr. W. L. Jones, of Jackson, Miss. The abutments were the first right lower bicuspid and third molar. Evans' seamless gold crowns were used in its construction. After fitting the abutment crowns to the first bicuspid and the third molar and properly articulating them, a bite was obtained and an impression taken with the crowns in position. From this impression a model was made as usual. The case was next placed in an articulator and an opposing model made from the bite. After this two Evans' crowns were selected, suitable to fill the gap to be bridged. These were sloped off from the under side, filled with solder, waxed in place, properly adjusted, invested and soldered.

Before investing the dummy crowns were taken out of the articulator and placed in the mouth to see that the bite was correct. A piece of wax placed under the crowns will prevent them being displaced when the teeth close on them in testing the bite.

TALMA, the actor, was a dentist's son.

THE Pacific Coast Dentist is the name of a new dental journal to be soon started on the Pacific coast. Let it come; we need 'em.

STRANGER.—" Where is that new dentist?"

POLICEMAN.—"You mean the one that pulls teeth without pain!"
"Yes."

"Go right around the corner. You will have no trouble finding his office. You can hear his patients yell half a block away.—
Texas Siftings.

When an able editor confronts a question beyond his depth he simply writes "comment is unnecessary," and lets it go at that.— Washington Evening News.

ONE-HALF ounce of lysol in sixteen ounces of water may be still further diluted to use as a mouth wash. The writer takes of this stock solution six drachms to four ounces of water for washing scalers, excavators, forceps, etc.

Sodium Fluoride, the more it is used as a sterilizer, the more satisfactory it becomes. Use a saturated solution for instruments and broaches.—Harlan.

MISCELLANEOUS AND SELECTED.

DR. NORMAN W. KINGSLEY is in Europe.

PROF. ROBT. KOCH, of Berlin, is visiting Chicago.

DR. C. V. ROSSER will fill a Chair in the Dental Department of the Southern Medical College.

DR. AMBROSE LAWRENCE, of amalgam fame, is dead. Another pioneer and good man gone.

DR. FRANK HOLLAND has been elected to fill the Chair of Operative Dentistry in the Dental Department of the Southern Medical College of Atlanta.

M. CHARLES GODEN and A. Ronnet have been designated by the French Government to visit the United States and attend the World's Dental Congress.

POPULAR FALLACIES.—That lovers of the beautiful never wear false teeth. That a millionaire is not bothered when he has the toothache.—Judge.

DR. A. M. HOLMES says if it is desirable to introduce silver nitrate into a tooth, heat a platinum wire, and the crystals will adhere to it and may be carried anywhere.

To remove stains of tincture of iodine, from either the hands or napkins, apply strong ammonia. The spots will immediately come out clear.

HIS TEETH.—"I say, Jenkins, can you tell a young, tender chicken from an old tough one?" "Of course I can." "Well, how?" "By the teeth." "Chickens have no teeth." "No, but I have."—N. Y. News.

Gold is supposed to melt as follows: 23-karat, 2012° Fah.; 22-karat, 2,009°; 20-karat, 2,002°; 18-karat, 1,995°; 15-karat, 1,992°; 13-karat, 1,980°; 12-karat, 1,987°; 10-karat, 1,982°; 9-karat, 1,979°; 8-karat, 1,973°; 7-karat, 1,960°.

Dr. GEO. W. McElhaney, of Columbus, Ga., this year filled the high and most exalted position of Grand Commander of the order of Knights Templar of Georgia. Dr. McElhaney never stops short of "the top" in anything he undertakes.

FROM the annual report of the President of the World's Columbian Exposition the enormous sum of \$16,708,826.48 had been expended up to March 31st, 1893. It will require something like two or three millions of dollars to complete the payment of the whole installation.

THE general fakirs as well as some of the special brood are beginning to swoop down on Chicago. The unsophisticated dentist should be on the lookout for adventurers of every description, or he will be likely to invest his money in some fad or other to his sorrow.—

Dental Review.

In fitting crowns, if a post is used, make the post with a maximum thickness of a pin so that only a minimum quantity of cement will be needed. So with the cap or butt which is aligned with the stump of the root, fit closely so that you do not depend upon the cement for strength.—Western Journal.

I THINK if we are always careful to have the rubber dam in place and see that the canal is kept flooded with some powerful antiseptic while the cleaning process is going on, at the same time using proper care to prevent penetration beyond the foramen, we will very seldom have to combat after-complications.—C. H. Stearns.

HE REFORMED WHEN YOUNG.—The London Graphic has a portrait and sketch of Potara, a Maori cannibal, who is 85 years old and still has a good set of natural teeth. He has not eaten a white man since 1816. He speaks well of white folks, but for a steady diet prefers a Maori, as the whites, or "Pakehas," have "a salty and bitter flavor." Potara must have a retentive memory of his tastes.

UNUSUALLY STOUT STRANGER.—"What do you charge for pulling a tooth, Professor ?"

Dentist-"One dollar."

Unusually Stout Stranger—"Charge anything extra for gas?"

Dentist (sizing him up)—"Yes, sir. I shall have to charge you \$3.00 a thousand feet."—Puck.

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THE best place to illustrate the use of the two golds in combination is in compound fillings between molars and bicuspids. The old way was to make permanent separations; now we cut through the grinding surface, extending the cavity back into a fissure sufficiently far to obtain secure anchorage; then beginning at the cervical wall, fill solidly with non-cohesive gold from one to two-thirds of the cavity, finishing off with cohesive gold and leaving the tooth as nearly as is in our power in the same shape as when intrusted to the patient's care by nature.—Dr. W. K. Slater.

RECORDS show, says Dr. P. W. Moriarty, that one in twenty of surgical operations performed for congenital oleft palate, are successful as an operation, but we never see a case where the speech has been made perfect. In fact, the more successful the operation, the greater the injury to the patient, owing to the increased difficulty of mechanical treatment. The causes of the failure of surgery to improve the speech is that even if the tensor palati muscles are not divided in operating, the palate after an operation is not of sufficient length to close the opening between the cavities of the mouth and nose.

It will be interesting to our readers to know that the State Dental law of California has been sustained by the court. This law was enacted to prevent quack dentists from practicing in our State, and to insure a better education of our practicing dentists. Many incompetent men from the East, drawn here by our climate are now imposing on the public. The State Board of Dental Examiners, of which Dr. Jno. C. McCoy is the member from Southern California, gained their first case against an illegal or unlicensed dentist of Los Angeles last week. This case may be quickly followed by others, now that a precedent has been established, and the incompetent dentist must either qualify himself to do scientific work or leave the State. Orange county is to be congratulated on having a member of the State Board of Dental Examiners with sufficient push and energy to lead the State in the enforcement of our dental laws.

THE stains of nitrate of silver, from either the hands or napkins, can be easily removed. First cover the spots with tincture of iodine, wait a few moments, then apply strong ammonia, and rub well.

THE

Southern Dental Journal and Luminary.

A MONTHLY PUBLICATION

DEVOTED TO THE INTEREST OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. JOHNSON, 306 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to Dis. W. R. Holmes & Mason, 366 Multiprick St., Macon, Ga.

Laiterial.

THE USE OF ANÆSTHETICS IN EXTRACTING TEETH.

Few minor operations are more dreaded by people generally than the extraction of teeth. Indeed, it has been so from the beginning of the world, and from the cradle to the grave. Yet it is something that almost every one is compelled to undergo at some time in life, and some unfortunate ones have the operation repeated many times.

It has been questioned whether one is justified in administering a general anæsthetic to relieve the pain and dread of this unpleasant operation. The late Dr. W. H. Atkinson was very decided in his views on this subject, and condemned severely a practice that would put a human being within one step of death's door for so slight an operation. As members of a progressive profession it becomes our duty to remove as much of the barbarous feature as possible, thereby relieving as much of the dread of dental operations as we can by the use of both local and general anæsthetics.

There is no reason why we should not progress in this direction as well as any other. We have the drugs; let us learn to use them for the convenience and comfort of our patients. Once in a while, it is true, we see an article stating that death has been produced from inhaling nitrous oxide gas or from an injection of cocaine, or from the use of some other of our most harmless alleviators of pain. Most of these notices come from newspaper reports, the accu-

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racy of which is always questionable, and before we condemn too severely these old tried friends we should investigate the case thoroughly. My sentiments are somewhat voiced in an editorial clipped from the *Brooklyn Medical Journal*, as follows:

"A Buffalo lady who had gone to a dentist to have some teeth extracted, is reported to have died in the chair while inhaling nitrous oxide gas. If this report is correct we must not attribute the death to the gas until we know more fully the history of the patient. Of all the anæsthetics that we have at our disposal, none is so safe as nitrous oxide; indeed, we have come to believe that it is absolutely devoid of danger. The enormous number of instances in which it has been safely administered certainly justifies this opinion."

I do not wish to be understood as advising or recommending the use of anæsthetics for every little trivial operation, but we should be prepared, competent and accomplished in their administration when necessary.

When roots are to be removed, abscessing or dead teeth, the pain of the operation can be almost entirely removed by an injection of a weak solution of cocaine in the tissues surrounding. A strong solution, nor a great quantity is not necessary, and the relief very perceptible. If a separator is to be applied, a gold band to be fitted, a strong medicine to be injected, the pain can be almost entirely removed by the judicious use of this wouderful medicine. These little details in practice should be looked after. If it takes time, give it and charge for it. You will rarely have patients object to paying for extra time and trouble, if by so doing they can be relieved of pain and inconvenience. Work on this line. Go slowly and carefully and watch the results.

CEMENTS AS ROOT FILLINGS.

The zinc cements, both oxyphosphate and chloride, have for some years probably been the most popular materials for root filling in devitalized teeth that we have. Their ease of manipulation and supposed insolubility when protected from the fluids of the mouth, largely account for this. At one time I strongly advocated the chloride on account of its being generally slow setting, and possessing antiseptic qualities. Finding objections to this, I tried the oxyphosphate, which, being of a harder and more durable mass when set, is, in many respects, superior, but itself not free from objections.

We all see devitalized teeth that have been filled for years without giving any inconvenience whatever, when suddenly the patient is made known of its presence by the sudden development of a severe case of pericementitis. This often is a puzzle to both patient and operator. By careful observation and experience in my own practice, in the use of these materials, I have come to the conclusion that these conditions are not uncommon where they have been used. Hardly any cement filling in the root of a tooth, with an apical foramen large enough to admit fluids, will remain longer than a year or two without absorbing enough poisonous product of decomposition to give off a perceptible odor. Of the two, the chloride is the less durable, though I do not consider either at all a desirable material for root filling, unless the apical foramen has been well sealed with some more indestructible material before its insertion. A tooth that is filled with it may be expected to give trouble sooner or later, and it must soon be discarded altogether and give place to some more durable and desirable material.

THE QUACK QUESTION AS HANDLED BY THE CITY COUNCIL OF MANSFIELD, OHIO.

"At the meeting of the Council of the City of Mansfield, Ohio, on November 29th, 1892, an ordinance was passed by a two-thirds majority, which prevents any quacks or itinerant venders of medicine, 'tooth-pullers' or other impostors practicing their nefarious schemes in that city without first getting a permit from the Health Officer, who, by the ordinance is required to be a physician. The ordinance also requires these quacks to display a diploma from some respectable college before the Health Officer can give them the necessary certificate entitling them to a license at all. On the presentation of said certificate to the Mayor they can receive a license for which they must pay not less than twenty-five dollars nor more than fifty dollars a day, and are also subject to a fine of not less than twenty-five nor more than fifty dollars, for each and every offense, for the violation of this ordinance.

"The law goes into effect immediately after its publication, and covers physicians, mid-wives, pharmacists and dentists. If every City Council throughout the State of Ohio would follow the example set by the Council of Mansfield, they would take a grand step in the direction of getting rid of quacks and impostors which infest all our large cities. This plan has been tried in Kentucky, and so

far has proved to be of great advantage in getting rid of these leeches, and should be followed by all the States that have no special laws or that cannot get special legislation to remedy this great evil."

Certainly this is a step in the right direction, and City Councils all over the country should be prevailed upon to pass similar ordinances and enforce them. Whether a profession will be protected from impostors rests largely with the profession. Such laws are never passed until they are asked for and insisted upon. ers have so much to look after that they are apt to overlook such matters as these or fail to view them in their proper light. professional men in these cities should present the case before the Councils and show them where it is their duty to not only protect the professional men practicing within the borders of the city, but to protect its people also. They are the ones who are most imposed upon by quack medicine men and "tooth pullers," and in each case before such fakirs are allowed to impose upon an ignorant and unsuspecting class of people, they should be required to show up their credentials. Such ordinances could be passed in nearly every city if the professional men in each would put themselves to the trouble to call the attention of the Council to it and insist upon its passage. and would result in the saving of thousands of dollars to the poor and uneducated classes.

It is not a common practice of publicly extending thanks or expressing appreciation of personal kindnesses shown, but the heart of the editor of this Journal, though probably seared by disappointments in love, a fault-finding public and contact with "printers' devils," is not all white marble, and there is yet remaining a responsive chord that has not been petrified. While attending the recent meeting of the Georgia State Dental Society, at Atlanta, this chord was frequently touched by the many kindnesses extended by To Dr. J. S. Thompson we are indebted for a the local brethren. refreshing drive, in company with Drs. Hill and Rosser, around the city, taking in his suburban farm. Dr. Thompson is demonstrating the fact that it is possible for a dentist to do other things besides treat teeth. He has a party of miners employed improving his place, and we were just in time to see a part of a large hill torn away by a dynamite cartridge, which is being used to fill in a ravine. We were next driven to his elegant residence, where we were received by Mrs. Thompson, and the hospitalities of his house were extended us in real Southern style.

From Dr. C. V. Rosser we received similar treatment In company with Prof. Morgan, Dr. Hill, Dr. Cole, and Dr. Jewett we were taken to his luxurious "West End" home, where we were royally entertained.

To Dr. Frank Holland we are indebted for an entertaining visit to many places of interest about the city, including the various Clubs of which he is a member. For richness, comfort and elegance the Jewish Club surpasses anything we have ever seen in the South, and for artistic arrangement and beauty compares favorably with anything of the kind anywhere. Dr. Holland is an honorary member of this Club.

To Dr. Catching, Dr. Holliday and others we are indebted for an invitation to drive, take tea, etc., which, from pressure of Society matters, we could not accept.

Atlanta is a great place in which to meet, and all express themselves as being highly pleased with the treatment of the profession of this enterprising city. While we could not force ourselves on them again next year, we hope to enjoy their hospitality again before many seasons.

THE GEORGIA SOCIETY was honored by the presence of many distinguished visiting gentlemen. Prof. W. H. Morgan was on hand, and was the life and interest of the discussions. Dr. Rambo, of Rio Janeiro, Brazil, a former Georgian, who has made a fortune and distinguished himself in South America, was there, as was also Dr. G. F. S. Wright, of Georgetown, S. C., who has won so many badges of honor in the Southern Association, as well as his own State. He is now chairman of the South Carolina Examining Board.

The genial and only Dr. S. B. Cook, of Chattanooga, President of the Tennessee State Dental Society, was with us, greeting his friends and extending invitations to meet with them at Lookout Mountain in July. Those who can will find it pleasant and profitable to meet with them. Lookout is cool and healthful, and the Tennessee dentists never do things by half. But I must not forget the handsome Secretary of the Alabama State Dental Society, Dr. Foster. The Georgia Society is always glad to have such men come to its annual gatherings.

SPEAKING of reporters, Mrs. J. M. Walker is the best Dental reporter in the South.

ATTEND the meeting of the Virginia State Dental Society at Charlottsville, August 8th. A Virginia welcome awaits you.

WHEN our May issue made its appearance in its bright new dress, brimming full of original matter, it was received with enthusiasm all over the country.

THE Tennessee State Dental Society would be glad to greet you at Lookout Mountain, July 4th, 1893. Meet with them and feast your eyes on the grandest scenery in the world.

Just out, another edition of "Letters From a Mother to a Mother," thoroughly revised and illustrated. This book should be in the hands of every mother in the land.

As we are sending out a good many sample copies with each issue, there may be some who will receive a copy of *this* issue who have not heard of the change in publishers, etc. To those we respectfully ask attention to the "Publisher's Notice" on another page.

THE WORLD'S COLUMBIAN DENTAL CONGRESS, at Chicago, August 14th to 19th, 1893. The memory of this Convention and what it accomplished will live and figure so prominently in the history of this profession that it will be with pride that those who attend can look back and say, "I was there." Do not miss it; you cannot afford to.

BECAUSE there is so little said of late regarding the Dental Protective Association, there may be some who think that its work is finished and it is gradually growing extinct. If this is your opinion you were never so much mistaken. The good work is still going on of fighting patent monopolies, and protecting its members. There are some new developments which are said to be brewing. It is not too late yet to join, and if you are not a member, it would probably be well to look after that immediately.

Correspondence.

COLUMBIAN LETTERS.

FROM C. O. LUMBUS.

The Columbian Exposition has opened since my last letter, and the minds of thousands of people are turned to the "White City" up on the Lakes. A rush of people such as the world has seldom seen, will continue to enter her gates, from now until the ides of November are passed; and just about the time the Exposition will be at its best, whilst thousands of people are winding their way through the vast buildings of Art, Science and Mechanics, the "Columbian Dental Congress" will open its doors, and there will be present the best men of our profession, from away up in the North, where twilight lingers into early dawn, and from all over our own "Sunny Southland," away down where the balmy breezes of the Gulf fan your cheek, where the orange tree blooms and the mocking bird sings its sweetest song; from the East, where the rising sun peeps over the Plains of Abraham, straggling up through the rugged peaks of New England mountains, winding its way to the "far distant West." where it sinks into the bosom of the grand old Pacific at the "Golden Gate." All these sections of our country will be represented there, by the grandest and best men of our own country, with others from "the many Isles of the Sea," and from every clime and nation where our noble profession is They will come to give as well as to receive. practiced. Then how important it is for us, as a profession, to bend every energy of ours to make it a success. Many of us can help, if in no other way, merely by our presence and contributions. We should all shape our affairs to be there at that time. Do not say it is too hot or too wet, for it is a pleasant time, especially for us from this section, to be there. I think it is the best time in the year. Do not be in a hurry to get off to see the Exposition; that will still be there waiting for you, and besides you will be there when you will see everything of any value or invention that relates to our profession presented in its best form, and you will come in contact, face to face, with the best informed men of our calling, from all over the world. come and unite with the Congress, and give it your financial support as well as your presence. Do not fail to come because you have no prominent place assigned to you, but come and make one, and a name by giving the profession some of that valuable information you have had all these years.

Some of you fail to attend your "State meetings." You take no interest in any Dental Association, and now here will be a broad platform raised to meet all men. Many, I fear, will not avail themselves of this grand opportunity of their lives! Some remind me of an incident that I know once occurred, and to illustrate their position, I will relate a conversation between a man by the name of Dinkie Winklin, a kind of a "Ransy Sniffles," who ran a small store in a village in an adjoining State, near my father's plantation, and an old darkey known as Jackson Dukes. Winklin was a fairly clever man. but he had an objectionable way of inquiring into most everybody's business, and was considered a very good live tattler, at the same time he had a very good eye to the main chance in keeping up his nickel trade, and was desirous of having the good opinion of the community, which, in his mind, he was not certain that he held. This old negro Dukes, drove the big ox team on the plantation, and was quite an influential man with his people; often "zorted" at their church meetings, and was very well liked by the white people-a man of good common sense, knowing pretty well how his "bread was buttered." One day, after making some small purchases at the store, he was about to leave, when he was accosted by Dinkie Winklin, asking him about the crops; how much cotton they were going to make, and telling him of the general prosperity that was going to follow that Fall; and, feeling pretty well satisfied with the several nickels' profit he had made on the sales, turned the conversation to the community and several gentlemen in particular, saying, "Now, Jackson, there is your Mars Leyton; he is a clever man, and you have a mighty good home." Jackson answered: "Yes, Mars Dinkie, dat's so; everybody says dat." Dinkie continuing, said, "There's your Mars Holy Josefield; he is a very clever man." "Yes, Mars Dinkie, dat's so; everybody says dat." "And there is your Mars Frazier Alexander, there is no cleverer man in the county than him." "Yes, Mars Dinkie, dat's so; everybody says dat." Dinkie, after some slight hesitation, as if he was not certain he should say it, continued, saying slowly, "Now, Jackson, there is your Mars Dinkie Winklin, he is a clever man, but there are damn few that ever says anything about it." The same politic reply from Jackson was, "Yes, Mars Dinkie, dat's so; everybody says dat," was not what he expected, and he turned abruptly on his heel and walked off. The old negro went out on his way, but if you could have heard him tell it, and seen the merry twinkle of his eye, you would have thought that he well knew that he had not answered Dinkie exactly as he expected him.

Now, have we not a lot of "Dinkie Winklins" all over our land? Some that will praise men of prominence, talk of their fine operations and methods of practice to their patients, comparing themselves to them, run down their oponent's work whenever they have a chance, take out their fillings, and often insert inferior ones in their place. Yes, Mr. Editor, we have "Dinkie Winklins" in Georgia; some young, as well as old, and the bottom of it all is pure selfishness, jealousy, and that lack of true manhood and professional regard that we should have for one another. A broad and liberal mind that will enable a man to rise above the small ideas of a "Dinkie Winklin." There are several kinds of these men, and it would take too long in a short article like this to describe them. There are many who think they are extraordinarily smart, have had superior advantages, and are operators compared only to Dr. Gassbag, from "Windy City," or Dr. Knowall from Centreburg, or Dr. Pleasantface from Pleasantville, but "Dinkie," "there are but damn few that care anything about it," and you might as well go to work and do something for the profession, and try to make yourself a broad, liberal minded man that can take a young man fresh from college, or a rough diamond from away off in the red hills, that has tried to live right and do the best he could at all times for his patrons. and has helped in his humble way to maintain the dignity of his profession these many years until his head is whitening for the grave. by the hand, and say my brother, I have been all along these rough places, my young friend, I can show you how to shun that pit-fall, it liked to have got me, rise above "Dinkie Winklinism." the band of noble and true professional brothers who lay aside their own business, and often at a greater personal sacrifice than you would have to, and go to the Dental meetings, act on committees, do and say something to advance the interest of our noble profession that has given you food and raiment for these many years.

CHICAGO, May 25th, 1893.

Editor Southern Dental Journal, Macon, Ga.:

Will you kindly say to the readers of your JOURNAL in your next issue, that the house of the Columbia Dental Club of Chicago, No. 300 Michigan Avenue, is open wide to the gentlemen of the profession who visit. Chicago this Summer, and a cordial invitation is extended to them to make it their headquarters while in the city.



You might also say, that if it is so desired, by addressing the manager of our Bureau of Information, R. C. Brophy, in care of the club, they can secure such rooming accommodations as they wish.

Very truly, FRANK H. GARDNER, Chairman Local Committee on Entertainment, W. C. D. C.

DANVILLE, VA., June 3d, 1893.

Dr. H. H. Johnson, Editor Southern Dental Journal, Macon, Ga.:

DEAR DOCTOR.—Allow me to congratulate you upon the last issue of the JOURNAL. You can feel proud of it. I assure you it is now the peer of any. Much success to you and the SOUTHERN DENTAL JOURNAL AND LUMINARY. Yours, etc.,

E. P. BEADLES,
President Virginia State Dental Society.

JACKSON, MISS., June 6th, 1893.

Drs. W. R. Holmes & Mason, Publishers

Southern Dental Journal and Luminary, Macon, Ga.:

GENTLEMEN.—Permit me to congratulate you on the appearance of the JOURNAL, and kindly send me an extra copy of May number, to be sent to a party out of the State.

Yours truly.

A. H. HILZIM.

GOLDSBORO, N. C., June 8th, 1893.

Dr. H. H. Johnson, Editor Southern Dental Journal and Luminary, Macon, Georgia:

DEAR DOCTOR—As a professional dentist who loves his life work not for the money that is in it, but for the boon it is to suffering humanity, it is natural that I should feel in common with my confreres of the profession, a lively interest in everything looking to the advancement of our profession to the highest plane of scientific achievement and literary merit. It is for this reason I write to congratulate and encourage you on your valuable and successful efforts unto this end.

The press has been called the "fourth estate," and this is true of its power in all the avenues of advancing civilization. Silent as the snowflakes in their drifting fall, but powerful as an "army with banners," it goes forth to do and dare and lead.

It is with peculiar satisfaction that I note the decided improvement in your progressive and valued JOURNAL AND LUMINARY.

The advance in the price is reasonable and proper, and when we

consider the cost of the change, the artistic beauty of design, the faultless typography, the wide scope of reading matter, etc., we feel that Southern dentists are greatly indebted to you for giving them an organ that compares favorably with any dental journal of any place or section. It is the duty of Southern dentists and the Southern Dental Association to give you a most generous support, and I cordially wish that such may be your experience with the Southern Dental Journal And Luminary.

Fraternally yours,

B. F. ARINGTON.

VALDOSTA, GA., June 1st, 1893.

Drs. W. R. Holmes & Mason, Publishers Southern Dental and Luminary, Macon, Ga.:

GENTLEMEN—The May JOURNAL received. You and its editor are to be congratulated on its general get up, and I wish you every success.

Yours very truly,

N. A. WILLIAMS,
President Georgia State Dental Society.

OXFORD, N. C., June 3rd, 1893.

Dr. H. H. Johnson, Editor Southern Dental Journal, Macon, Ga.:

MY DEAR DOCTOR—The May JOURNAL received and I must congratulate you upon its general get up, and I hope it is upon firm basis and has come to stay and be what it should be, a first-class journal.

Sincerely,

J. E. WYCHE,

Secretary North Carolina State Dental Society.

OFFICE OF THE MUTUAL PRINTING Co., Atlanta, Ga., June 2d, 1893.

Dr. H. H. Johnson, Macon, Ga.:

DEAR SIR.—We received the copy of the DENTAL JOURNAL, and must compliment you on the increase of "ad" patronage. Also in the bright LUMINARY cover. When I received the copy I felt that I was shaking hands with an old friend who had been off on a trip and had grown fat and saucy.

Hope you will continue to improve it and make it one of the best journals in the country. When you improve month after month, you will find that your field is not fenced in, but that your pasture will be as green in one part of the United States as another.

Yours truly,

LEON P. SAWTELL, Manager.

THE

Southern Dental Journal

AND LUMINARY.

Vol. XII.

Macon, Ga., July 1, 1893.

No. 7.

Original.

PYROZONE.

A FEW THOUGHTS ON THIS NEW PREPARATION AND SOME OF ITS
USES. BY DR. I. N. CARR, TARBORO, N. C.

Pyrozone has but recently been brought to the attention of the profession by McKesson and Robbins, of New York. It consists of accurate percentages of H2O2 (Peroxide of Hydrogen), and is There are three solutions, viz.: 3 per cent. always reliable. aqueous, five and 25 per cent etherial, that is by weight. cent is used as a mouth wash, and can be used freely as such without injury to the teeth or soft parts. Used as a spray from an atomizer, it will insinuate itself between the gum and teeth, and by its oxydizing action, bring to the surface any pus that may be hidden from sight. It also acts upon incrustations about the teeth. softening it up, thus rendering it removable with but little effort. I have also found it to be the very best remedy every employed for those disagreeable cases of posterior nasal catarrh. The method as practiced in my own case, was to fill a straight drachm vial with the preparation and pour it into the nasal passages, ejecting it from the mouth. I did this three times a week for two weeks, and relieved myself entirely of a case of two years standing. It produces a slight irritation, which soon passes away, leaving a very pleasant taste behind.

The 5 per cent. pyrozone is etherial, that is, it contains 5 per cent. of the pure peroxide of hydrogen, by weight in ether, and unlike the 3 per cent. cannot be used freely in the mouth because of its being slightly caustic; but applied on small ropes of cotton, pushed under the gum and around the teeth, and left to remain from half to one minute, pus will immediately be seen to bubble up from around the tooth, and owing to the freedom with which it parts with its extra atom of oxygen, will search out and find pus if any be there. It is only necessary to try it once in pyorrhoea alveolaris, to convince any one of its value in these cases. thoroughly an antiseptic, and one of the finest tooth bleachers ever given into our hands. For bleaching teeth and rendering offensive pulp canals sweet and sterile, I have never seen its equal. bleaching, the rubber dam is first adjusted, and the appical foramen hermetically sealed, then by means of the glass atomizer, the pyrozone is sprayed into the pulp canal chamber, and whatever cavities may be in the teeth. Immediately the tooth will be seen to change color, and in a few minutes will be transformed from an almost black tooth, to one resembling its healthy neighbor, and all this without any possible injury to the tooth structure, and why? Simply because it acts upon the color compound in the tubuli of the dentine, and extracts it. When you consider what you are using, no doubt can arise in your mind as to its harmless nature on tooth structure, for you simply let loose the extra atom of oxygen which attacks the hydrogen in the color compound, and when this is given off you have only remaining H2 O-water.

For treating alveolar abscesses, the dam is well adjusted, and the preparation sprayed into the root; immediately pus will begin to flow, this is continued gently until there is no more discharge, when the root can be filled with cotton and the orificesealed. Leaving this until the next day, when upon removing the seal and dressing, the cotton is found perfectly dry and sweet, the soreness in tooth all gone, the root may be immediately filled with whatever material you can make the best root filling of. No harm would be done if the root dressing of cotton be allowed to remain two or three days. I generally moisten the cotton with pure alcohol; this is done simply to show that no other antiseptic is used than the pyrozone. The 25 per cent. pyrozone contains 25 per cent. of pure peroxide of hydrogen in ether, and is very caustic, it should therefore be handled with great care. I have used this in cases of pyorrhœa

alveolaris, in the same manner as described in the use of the 5 per cent., that is, on ropes of cotton, and found very decided benefit from one application. I think by its use many teeth which have heretofore been given over to the forcep, can be made useful members by the judicious use of this very valuable adjunct to the dental pharmacopœia. The 25 per cent. is also a fine bleacher, if not the This and the 5 per cent. are put up in glass tubes, and as soon as opened should be immediately transferred to clean glass stoppered bottles and kept in a cool place. The bottle should never be more than two thirds full, so as to allow for expansion. any should be accidentally spilled on the hand it will sting a little, and bleach the cuticle, but in a short time will all disappear without any seeming injury to the skin. It does not produce the true eschar that carbolic acid or other eschartics do. I have only been using these preparations since they were first brought to the attention of the profession some three or four months ago by Drs. Atkinson, Kirk and Ottolengui; but it is my purpose to test them thoroughly during the coming twelve months, keeping a record of all cases treated and the results, which I then hope to publish for whatever benefit may possibly accrue to the profession therefrom. I hope also to report my experience with sodium peroxide under the chemical formula of Na₂ O₂. So far it has proven very satisfactory as a tooth bleacher and sterilizer of pulp canal contents. found that in teeth that have a distinctly yellow discoloration, the pyrozone does not act so well as in teeth of a blue black color; in these cases I have used the sodium peroxide of 50 per cent. strength and followed this by a 10 per cent. solution of trichlorocetic acid, as described by Dr. E. C. Kirk in the Dental Cosmos for March. On these cases it acts well. The pyrozone atomizers are made with three different glass parts, one each for spraying the upper and lower teeth, and one straight tube for spraying other surfaces. order sent to Mr. J. W. Selby, of the S. S. White Dental Manufacturing Company at Atlanta, Ga., will be promptly filled. One atomizer with the two additional tubes, one curved downward and the other upwards is all that is necessary; as the different tubes can be easily attached or detached. I would like to see results reported from those who will use this preparation during the year.

The stains of nitrate of silver, from either the hands or napkins, can be easily removed. First cover the spots with tincture of iodine, wait a moment, then apply strong ammonia, and rub well.

SOME OF MY FAILURES AND THE CAUSES.*

BY DR. B. F. SIMS, CEDARTOWN, GA.

To advance we must see our mistakes, to be successful we must profit by our failures. The pathway of the dentist is aught but one bedecked with flowers. When I stepped out with my diploma a few years ago, I thought there was little to do except to go and make a name for myself. I felt that I could do first class work, and hoped that at least, I was an average graduate. I had gotten it into my head that anterior teeth should be filled with gold and started out with that idea. I can recall now, times in my practice when I had done good, and as I thought then beautiful, operative work. I can see myself now standing admiring the work, and thinking it would be there when the patient made his exit from this world. am glad no one was there to see how small I felt, when some two years after, I had occasion to examine the same teeth. humiliation enough without witnesses. I commenced an investigation to ascertain the cause of my failures. Take the case of Mr. A., for instance, the class of teeth was good. The fillings had been put in with a combination of noncohesive and cohesive foils and were found to be leaking—giving way usually on the palatal sur-Why was this? There are many reasons for it. the cavity was not properly prepared. There were thin walls left with ragged edges, which of course had chipped off, causing a leak. Then I had been taught that the cervical margin was the place that was prone to give way and I had guarded against it at that point. Lastly, I had operated from the labial surface.

In operating for Mr. A. now, I adjust the rubber dam, divide the teeth with a separator, cut away all thin walls and prepare the cavity depending on the undercut, which should be slight, to hold the filling. After smoothing the edges of the cavity with disks and polishing strips, I introduce the gold, (noncohesive,) in folds from the palatal surface, packing against the cervical portion of the tooth. After filling the cavity full of these folds, I commence at the center and force a plugger in between the folds as deep as possible and work in cohesive foil, depending not entirely on a union of the golds, but on the wedging also. When this is contoured out and well finished, I again think I have put in a beautiful filling and one that will save the tooth. I do not wish to be understood as

^{*}Read before the Georgia State Dental Society, May, 1893.



saying that this filling is better than an all cohesive one can be made, but simply say it is a tooth preserver, can be done in a shorter time and is more easily accomplished.

In the case of Miss C., I put in a number of splendid gold fillings, that I thought would save her teeth. Well, she also came back in about two years, and decay had progressed until the fillings were ready to drop out. Why was this! I am now satisfied that these were not teeth that should have been filled with gold at that time. The gums were not in good condition. In inflamed gums the mucous is acid, which if allowed to remain on the teeth will soon cause an attack of white decay. In that case now, I should adjust the dam, remove the decay, polish the surfaces and fill with cement. I would let that remain, say two years and fill with gold as before. If in the meantime the mouth be properly cared for, the teeth will be harder, less sensitive, and in better condition to stand gold fillings.

I have not written this paper hoping to benefit any old member of the profession, but thinking perhaps, some of my junior friends might be benefited. To each of you, I say look to your failures, learn lessons from these, your successes will take care of themselves.

OPERATIVE DENTISTRY.*

BY DR. J. C. BREWER, BLACKSHEAR, GA.

In preparing a paper on operative dentistry I feel at a loss for the subject is so broad, and has been treated by so many more competent than myself. With an experience of twelve years, I find that a practitioner can learn something each year that will aid him to treat the dental organs more successfully. It is particularly the young men entering the profession whom I hope to benefit, or at least to put to studying, and working for the advancement of the profession.

A great deal has been written about the care of children's teeth, but I think the only means by which we can get at the children's teeth is to go back, and enlighten the father and mother on the important subject of the dental organs. Is it not an almost daily occurrence that a parent will carry to your office, children from

^{*}Read before the Georgia State Dental Society at Atlanta, May, 1893.

seven to twelve years of age, and say: "Dr. I wish you would extract that back tooth, it has never been shed." What condition do you find gentlemen? The sixth year molar decayed to the nerve, you will know the surprise of the parent when informed that it is not a shedding tooth. With the natural interest of a parent in the welfare of the child, they would not have had the tooth in the existing condition for many times the cost of filling it in time. Pardon me for thus deviating from the subject, but is it not true that parents educate their children, and call a physician whenever one seems to be needed; they are not unmindful of the child's welfare, but when it comes to their teeth they scarcely know one from the other, and do not even know how many temporary teeth a child has, or the proper time for them to shed. You can talk about the mother or nurse using the brush, and teaching them how to use it, which is very good, so far as it goes, but we, as a profession, in justice to the public must do more. You ask how are we to do it? My idea is this; let every practitioner provide himself with a treatise on the teeth, dwelling particularly, and in plain language on the time of eruption of the temporary teeth, the number, and the time for them to give place for the permanent teeth, and all other matters pertaining to the welfare of the dental organs. tribute to patients. The majority will be benefited, and we as a profession will feel and know that we have done our duty in this particular. Give the public a chance to learn the great importance of having a healthy mouth, and I would go further and say that we should have more dental literature distributed to the public generally; keeping in view the enlightenment of the masses.

FILLING DECIDUOUS TEETH.

I do not believe after a tooth of any kind has decayed well through the enamel, that you can stop decay permanently by excavating, and polishing the surface as some writers hold. In filling deciduous teeth, never deceive your young patient, but get the full confidence of the child, and you can generally accomplish your purpose. Before commencing an operation, parents too frequently tell the child the operation will not hurt, which is very wrong and misleading, and will do you and patient harm. Shape your cavities to best advantage and fill with guttapercha, I say guttapercha, first because I think it will last longer than most kinds of cements, and second, because your cavity and filling is less liable to get wet in the introduction of a guttapercha, than a cement filling in a child's mouth. In grinding surface cavities of bicuspids and molars, a

good practice is to cap guttapercha with amalgam, possessing a large percentage of tin. If the nerve is exposed and painful, devitalize nerve, my remedy is equal parts of oil-cloves and carbolic acid. I never use arsenic in a deciduous tooth, as there are other remedies less dangerous through penetrating the large open foramen. While I am on the subject of deciduous teeth, I will relate a case where arsenic was employed. I was shown a bottle of so called toothache-drops, which was purchased at a country store; some of the contents of which was put in an aching tooth of a child about seven years of age. The medicine penetrated through the foramen of the tooth; necrosis ensued and in spite of medical aid resulted in the child's death. The bottom of the vial was covered about an eighth of an inch with arsenic.

THE SIXTH YEAR MOLAR.

Of all the teeth they should have our special care; for in the majority of cases the wisdom tooth is less dense, and more liable to decay than any of the other molar teeth, and if you should lose the sixth year molar, you would have to depend on the twelveth year molar for future use. Teeth to be preserved in a normal or healthy state must be used. Frequently we find that one offending tooth has caused the failure of several teeth on the same side of the mouth, and in all such cases the tooth should be put in a healthy condition or removed, and impress upon the patient the necessity of masticating on all of the molar teeth.

MATERIAL FOR FILLING TEETH.

We are living in an age of progress. When the idea was first advanced that rubber would take the place of gold, as a base for artificial dentures, it was doubted by the majority of the profession, and some were very extreme in their criticisms of the vulcanite base, but the rubber is here to stay, and has been a blessing to the majority of the human family. So it is to day with regard to gold as a filling material. Gold is a good filling in its place, but it is unwise to determine to use it in all cases, when a great many teeth can be saved longer, and with less cost to patient, with some other material. I have always been opposed to any and all kinds of, you might say, sticking plasters, for commencing gold fillings, as I find nothing so good as retaining points, but I have often thought if we could get a substance which we could flow into a cavity that would become dry in a moment or two that it would be beneficial. My experience though not very long, has been very gratifying in the

use of what is known as Dr. Daniels mastic. Before using it as a lining in teeth, I put a few drops on a piece of glass, and after waiting two minutes I immersed the glass in water for several days. On taking it out of the water I found the mastic adhering about the same as when I first put it in water. This satisfied me as to its adhesive quality. My method is to prepare the cavity thoroughly and apply mastic, wait a moment or two and I have an impervious coating which closes the mouth of the dental tubuli, and I must think that it acts as a nonconductor to some extent. I do not advocate its use, neither do I feel that it would be necessary in small cavities, when you have solid tooth substance, but in all cavites when the decay has progressed to a considerable extent I think it a good practice, and under all kinds of filling material. The idea is to stop or seal up the dental tubuli, in so doing you retard the progress of decay.

ROOT FILLING.

There are a great many materials employed, and a diversity of ways of introducing the same, but I like nothing so well as cotton saturated with creosote, and then dipped in oxide of zinc. I think a great many failures in root filling are due to the fact that in using cement often the material does not reach the apex. In the use of the cotton you are not compelled to hurry your operation, and I believe it can be done more perfectly to say nothing of the action of the creosote on the tooth.

CAPPING EXPOSED NERVES.

I do not consider this good practice. I have been quite successful in a few instances, but I would not recommend it as a safe road to travel. In all cavities after you have prepared them, and find that only a thin coating remains over the nerve, then it is good practice to fill the cavity half or two-thirds with an oxyphosphate. In the practice of dentistry as well as in every other avocation in life, fair dealings should be our basis of action in all that we do for suffering humanity. We should avoid making wrong impressious upon the young men entering the profession; and impress upon them the importance of true manhood; keeping in view the elevation of our beloved profession, and with this end in view let us all unite as a brotherhood, and individually endeavor to be present at each annual convention and lend our aid to the profession we love.

GEORGIA STATE DENTAL ASSOCIATION.

TWENTY-FIFTH ANNUAL SESSION.

ATLANTA, GA., 1893.

The meeting was called to order in the Kimball House at 10 A. M, Tuesday, May 9th, 1893.

lu the absence of the President, (Dr. S. M. Roach, Savannah,) the Chair was occupied by Vice-President, Dr. N. A. Williams, Valdosta.

The meeting was opened with prayer by Rev. J. W. Lee.

An address of welcome on the part of the citizens of Atlanta was tendered by Mayor pro tem. — Shropshire.

Dr. B. H. Catching welcomed the Association in the name of the members of the profession of Atlanta.

Dr. John H. Coyle, Thomasville, responded in behalf of the Association.

Routine business was then taken up.

Dr. John H. Coyle offered an amendment to section 8 of the By-Laws, providing for more prompt infliction of the penalty upon members found guilty of violating the laws of the Association. As the by-law now reads, offending members may violate it through the time the Committee on Impeachment is investigating the case, and in the meantime posing as a member in good standing in the Society.

The resolution was freely discussed, and was finally, with the consent of Dr. Coyle, placed in the hands of a committee consisting of Drs. D. D. Atkinson, W. G. Browne and John H. Coyle, said committee to report at the afternoon session.

In the absence of one of the members of the Executive Committee, Dr. J. C. Brewer was appointed to fill the vacancy.

Dr. W. G. Browne announced that at intervals between the sessions he would construct at his office, as a clinic, a gold bridge, carrying the four superior incisors, supported by the cuspids, but without cutting the latter, the patient being Dr. Mixon, of the Association.

On motion of Dr. L. D. Carpenter, a committee consisting of Drs. Catching, Tignor and Coyle, were appointed on Necrology.

The Committee on Membership reported favorably on the applications of Drs. R. R. Hope, Washington, Ga.; W. R. Tyler, Atlanta, and J. E. Cramer, Fairburn, Ga., who were elected members of the Society.

Dr. C. V. Rosser, on the part of the Executive Committee, reported as the order of business, session at 2:30 and 8 p. m.; clinics, at 9 A. M., Wednesday. Future sessions to be reported later.

On motion, adjourned.

FIRST DAY—SECOND SESSION.

Called to order at 2:30 P. M., pursuant to adjournment, Vice-President Williams in the Chair.

On motion, Drs. H. H. Johnson and T. P. Hinman were appointed a committee of two to assist the Secretary to prepare a report for the press.

OPERATIVE DENTISTRY being called, Dr. J. C. Brewer and Dr. B. F. Sims each read a paper. (See pages 304 and 305,) this issue.)

Dr. O. H. McDouald, in opening the discussion, took strong exception to Dr. Brewer's method of filling root canals with cotton and oxide of zinc. He had had occasion to remove a number of cotton root fillings, and had always found it a terrible mess unless the apical foramen had been thoroughly closed with something else. He would use either all gold or gutta percha at the apex, followed by gold.

He also criticized the use of mastic varnish in cavities. Carbolic acid will coagulate the contents of the tubuli without the use of mastic. In making a gold filling he would use either cohesive or non-cohesive gold, according to the case, but was not successful himself in combining the two in one filling. He found that it would break loose every time. He would not make a contour filling with the two mixed.

Dr. L. D. Carpenter said he had nothing to add to what had been said. He would, however, direct attention to one point. In the treatment of pyorrhœa alveolaris a remedy has recently been introduced called Pyrozone, which is similar in its action to peroxide of hydrogen, though more beneficial, more safe, and more reliable. It retains its qualities indefinitely, not deteriorating, as does peroxide of hydrogen. It is prepared in five per cent. and twenty-five per cent. solutions. The five per cent. is perfectly safe for use as a mouth-wash, for inflamed gums, etc. The twenty-five per cent. is a caustic solution, and is used in many places when peroxide of hydrogen is indicated. In the pockets of pyorrhœa alveolaris, where we look for pus accumulation, if applied on a shred of cotton, pus boils out very profusely. It works very nicely, and gives a greater

degree of success than anything else I have tried, and I hope you will all test it.

Dr. W. F. Tignor: Dr. Carpenter undoubtedly meant to say the three per cent. medicinal pyrozone to be used as a mouth-wash. I am using these preparations, and find the three per cent solution very efficient in controlling the inflammatory condition of the gums in incipient pyorrhœa alveolaris. For use in the pockets, cut off little bits of floss silk and dip them in the five per cent. solution, laying them on paper to take up the excess. Then place them down in the pyorrhœa pockets, and it will be found a very effective agent. I have not tried the twenty-five per cent., which is a caustic solution.

Dr. Sims, in reply to the criticism on his method of combining cohesive and non-cohesive gold, said that in forcing the cohesive between the folds of non-cohesive gold he relied upon the principle of wedging—not upon the cohesiveness of the gold. He obtained better retaining points in the non-cohesive gold than in drilling tiny holes in tooth substance.

Dr. Frank Holland wished to ask if pyrozone should be used in blind abscess, or should an opening be waited for. He does not attribute any curative power to peroxide of hydrogen. It simply breaks up the pus masses and washes it out.

Dr. Carpenter: The pyrozone acts as a cautery.

Dr. W. G. Browne: I wish to speak of the beneficial action of nitrate of silver in the teeth of children—the little tots who are so small that it is almost impossible to prepare cavities for fillings in their teeth. In these cases nitrate of silver can be used most satisfactorily in arresting caries. Though it blackens the dentine it does stop decay, though I have not used it long enough to be able to say how long the effect will hold good. Care must be had in its manipulation, not allowing it to get on to adjacent tissues.

Dr. R. A. Holliday: A satisfactory method of applying it is to soak blotting paper in a solution, and, when dry, cut it into small pieces ready for use. It is easy to handle and does not get into the mouth.

Dr. Catching: We would not be dentists if we did not differ in our methods. I pulverize it very finely and place it on the necks of teeth, where it is very valuable for the relief of sensitiveness. It does no harm even if it does darken them.

Dr. Haynes: It is important to protect the gums. I use it like a pencil, as it comes in sticks, and find it very valuable on the worn down teeth of old people.

Dr. Catching: I want to ask a direct question. How many of those here present make retaining pits for a gold filling? That is, in general practice, how many drill pits with the retaining-point drills?

(In reply to this question about half of those present raised a hand in the affirmative.)

Dr. Tignor: How do you start your filling?

Or. Catching: I get my anchorage from shaping the cavity properly. I do not drill out holes and then fill them up and build my filling on those spots.

Dr. Tignor: In a tooth with a healthy pulp, with dentine of normal density, I use a spear shaped drill, and in proximal cavities in central incisors I drill at the labio-cervical margin, and at a point in the cutting edge where the dentine and enamel anastomose. I cut down and secure my anchorage, but do not drill deep holes running parallel with the pulp.

Dr. Hall: Unless you have proper retaining points your filling will rock, and you cannot steady it.

Dr. Catching: S. S. White's crystal mat gold is the best thing to get for starting a filling. Anchor it and then build out with Bouwill's electric or the hand mallet. A layer of varnish is an excellent protection for the pulp. It acts as a non-conductor between the pulp and the metal, but do not bring it to the edge of the cavity, you can harden it with hot air to hasten the process.

I do not rely on it to hold the filling in so you cannot knock it out, but for the purpose of protecting the pulp. But I rely on anchorage not on retaining points.

Dr. H. H. Johnson: I am glad to hear an expression of opinion on this matter of retaining points. It is my opinion that, a cohesive gold filling cannot be inserted with any degree of certainty as to its correct adaptation without some point or pit in which to fasten the first or starting piece of gold so that it will be immovable.

You need not bore wells or dig ditches, but the first piece must be securely anchored, or the filling is almost sure to rock under the mallet, sometimes so little as to be imperceptible to the eye or touch, yet enough to cause a leak and failure.

Dr. Jewett: I would not know how to operate without a retaining point for my first piece of gold. I don't want two or three but one, to hold my gold while I anchor the filling in undercuts at the cervical margin and cutting edge. As to the proper depth of a retaining point, take a medium bur, just a little larger than the instrument you use to carry your gold. If you make it the depth of the diameter of the bur you will have a shallow retaining point

with parallel walls except for half the diameter of the bur, but if you make it 1½ diameters deep your parallel walls will be sufficiently deep to hold your first piece of gold.

Dr. Holland: Too deep undercuts weaken the walls of your cavity. You cannot see the margin and you trust to luck. You make the walls so frail that you cannot condense your gold properly, but will fracture the enamel margins. Suppose a cavity between the bicuspid and the molar, decayed so deeply that you have to force the gum away. If your undercut slopes down from above. from the cervical to the cutting edge, you have a better chance to see every piece of gold. Use cohesive gold thoroughly annealed. start with a pin-point drill and get it anchored, and then build on. You will have a strong wall, with but a little hole in the tooth substance between the pulp cavity and the enamel. Round out your fillings and never let two surfaces of enamel come together. prettiest fillings will fail if the enamel comes together at the cervical walls, and your tooth will decay again in spite of fate. Do not ent a gully in your tooth, but shape it so that you can see everything you put into it.

Dr. Holland considers it a crime to put rubber between the teeth for separating purposes; robbing the patient of rest and sleep, and injuring their health. By using cotton you may have to make them wait several days, but you cause them no suffering. Place a ligature between the teeth, then pack in the cotton; tie it down with your ligature and cut off the surplus. This forces the cotton between the teeth where they knuckle, and you can separate them in twenty-four hours.

Dr. W. G. Browne: Without being able to assign a cause for such an effect, it is a fact that cotton, used in this way, seems to allay sensitiveness of dentine. Patients themselves notice it.

Dr. Browne said that several years ago he had mentioned this fact before the Association and had asked that observation be made and reported, but he had heard nothing more of it.

Dr. Holland uses cotton for this purpose, but saturates it with sandarac varnish or tannin. This effectually relieves sensitiveness and prevents the cotton from becoming offensive, as it will do in twenty-four hours if this precaution is not observed.

Dr. Tignor: How do you shape fillings in incisors to prevent tooth substance from coming in contact?

Dr. Holland: Knuckle them. It is not necessary to allow much gold to show from the front, but contact of tooth substance should be prevented.

Dr. Tignor: They will come together at the neck of the teeth.

Dr. Holland: Not if they are restored to the shape that Nature gave them. If the teeth are cut apart so as not to touch, they are never comfortable. Last summer at Lookout, a prominent softgold man told me he had not used a piece of rubber dam for four years. He used nothing but soft gold, and cut the teeth wide open. But his disgusting use of the toothpick at the dinner table was sufficient proof that he enjoyed no comfort with his own teeth, which were cut open in the manner he advocated. Leave the space that nature made, allowing saliva and water to pass through. Insist on your patients using floss silk, and such fillings as I describe will last for years and years.

Dr. Thompson: I see no objection to the use of rubber for separating teeth. It is much more cleanly than cotton, and the object is effected more rapidly than with cotton. I do not say to use a great thick piece of rubber, and crowd it up to irritate the gums. Put in a small piece, and give your patient more to renew it if it comes out. The patient cannot replace the cotton, and if it does stay in it gets very offensive.

Dr. S. B. Barfield: Have you ever had a piece of rubber between your own teeth for twenty-four hours? Try it once some hot night, and see how you like it. Put in the cotton and instruct the patient after twenty-four hours to cut off a strip of card board—a postal card is good—and put it between the teeth, clipping off the projecting edges. It will stay there for months, and hold the teeth apart effectually.

Dr. F. Holland: I do not always use cotton, but I never use rubber, I often use orange wood.

Dr. L. D. Carpenter: I concur with Dr. Thompson in the use of rubber. It is not necessary to use a thick wedge. Very thin rubber does, perhaps doubled once is all that is needed.

Dr. H. H. Johnson: I consider rubber as used in separating teeth a relic of barbarism. Cotton is the most painless material you can use. Partially prepare the cavity and pack in cotton saturated with sandarac varnish, renewing it at several different sittings.

A tooth separated with rubber in consequence of the inflammation produced has a looseness—want of solidity that makes it difficult to properly condense a filling. Cotton when so used insures solidity as it causes no inflammation.

Dr. C. M. Rosser: I have been the victim of rubber separation between the incisors, and I can testify that it was the most severe

torture I ever had to undergo in my life, while a separation between the bicuspids with cotton, though made slowly, was efficient and with no pain. The incisors were made so loose and so sore that it was with difficulty that I could submit to the filling, cotton holds them perfectly steady and they do not go together during the operation of filling.

Dr. Holland: Why not use the separator and have it all over in ten minutes.

Dr. Rosser: I do not consider the use of the separator feasible in patients over middle age, and not in all cases even with the young.

Dr. Holland: I believe in Perry's separators. In one case where there were anterior and posterior proximal cavities in a bicuspid, and also in the molar, I drove the bicuspid both ways and made the three fillings at one sitting. The teeth had been cut open and touched at the gum margin. The bicuspid was a dead tooth. I have used the Perry's separator for the most delicate ladies, and it causes less suffering that rubber.

Dr. Rosser: I might use it in an emergency, but not in general practice.

On motion of Dr. Holliday, subject passed.

The following resolution was offered by the committee appointed at the morning session, as an amendment or substitute for Article VIII., of the By-laws:

"Any member may be impeached by three members for violating the laws of the Society, for malpractice or other gross misconduct, when conclusive proof is furnished. He shall be suspended from active membership by a two-thirds vote of the Society until the next regular meeting, to which he shall be cited to appear to answer to the charges made against him, a written copy of which shall be furnished him by the Secretary immediately after adjournment. If, however, the member charged be present, he shall be tried by a committee of three at the same meeting, and, if found guilty, may, by ballot, be suspended or expelled by a two-thirds vote of the members present."

After some discussion by Drs. Browne, Tignor, Holliday, Carpenter and Jewett, the substitute for Article VIII. was unanimously adopted.

On motion, adjourned.

(TO BE CONTINUED IN NEXT NUMBER.)

MISCELLANEOUS AND SELECTED.

PYORRHŒA ALVEOLARIS.

BY B. F. ARRINGTON, M. D., D. D. S., GOLDSBORO, N. C.

What is it and how to be treated? There is great diversity of opinion concerning the disease. Some contend that it is a constitutional disease, is hereditary, transmissible, etc., and requires to be treated with internal remedies; while others regard it a local trouble and treat it accordingly. I hold to the latter opinion and treat locally, and am generally satisfied with results, and so are my patients, especially those who respect and carry out instructions as to the care of teeth and gums. There is no disease with which the human family is afflicted that has been so much discussed and written about by dentists for the past ten or twelve years as pyorrhea alveolaris, and no other disease, possibly, has been so variously treated and with as unsatisfactory results.

The dental profession are no nearer together to.day as to cause of the disease and best means of successful treatment for cure than when first mention of the disease was made.

Dr. W. H. Atkinson, of New York, learned and scientific, and high authority in the dental profession, has said that "pyorrhœa alveolaris means pus of the alveolar sockets," and Dr. C. N. Pierce of Philadelphia, prominent and distinguished in the profession as a practitioner and teacher, says "pyorrhœa is pus in the socket." Both may be correct, but I do not think so. I believe and contend that pyorrhœa is pyorrhœa when the sockets are perfectly healthy and free from pus, as much so as when the disease has advanced and the sockets have become involved and hold pus in quantity. The disease has a beginning, and it is always at the margin of the gum, around one tooth or more; frequently only one or two teeth are involved in the incipient stage of the disease, then again we will find every tooth in either or both maxillary definitely involved. The disease is easily detected and comprehended after once seen and contrasted with a gum in a normal state.

The alveolar process and tooth sockets never become involved until the disease is well advanced. The name pyorrhæa alveolaris is erroneous and leads many astray. As above stated, the alveolus is never involved or in any way affected by the disease in the beginning, therefore should not be termed pyorrhæa alveolaris, but simply



pyorrhea. A disease of the gum, which, in course of progress, generates pus, and will, if not interfered with, sooner or later invade and destroy the alveolar structure and cause loss of teeth.

In the beginning or incipient stage of the disease there are no calcareous deposits on the teeth and never are until the disease has made definite impression upon the gums, possibly after a duration of some months. When the deposits are once formed, a cure cannot be effected until all deposits are removed from the teeth. All the constitutional treatment, mouth washes, flowing and reflowing with strong remedies the pus sockets, of which there is so much talk, packing around the teeth and deep down into the pus pockets with caustic paste, scarifying and excising gums, application of copper bands, etc., will not effect a cure. The deposits must first be removed and effectively, or there can be no promise of relief and cure. It is often the case that we find a tooth or teeth with sanguinary or serumal deposits well down the root and sometimes at the apex of root, which causes a pus discharge, loosening and ultimate loss of tooth or teeth, when there is no pyorrhea visible.

All is not pyorrhea alveolaris that is so called. Sanguinary deposits at or near the apex of roots is more difficult to treat than The two afflictions should never be confounded. In the case of sanguinary deposit the pus is formed deep down in the socket and works up to the margin of gum, whereas in pyorrhœa the pus formation commences above the margin of the alveolus and by degrees invades the entire process, to loss of same and loss of Every case of gum-waste, or recession of gum tissue we meet with is not a case of pyorrhoea, far from it. In a genuine case of pyorrhea that has progressed beyond the incipient stage, we always find considerable tumefaction of gum with discharge of blood or pus, or both on application of pressure. In recession of gum (not caused by pyorrhea) we find the reverse, and I may say almost universally, instead of inflammation, tumefaction and discharge of blood and pus from the gum as in pyorrhœa, the gum is often pale, contracted and shriveled. I have seen many such cases. and often recession of gum and loss of alveolar process quite to the apex of the palatal roots of superior molars, with freedom from soreness or even tenderness under pressure, and no blood or pus to be found. In such cases the teeth never loosen as they do in pyorrhea. In well developed cases of pyorrhea deposits are always to be found, and blood or pus, or both, freely flow. In gum-waste or recession of the gum there is no deposit as a general rule, or very rarely; nor is there discharge of blood or pus. Very unlike derange-

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ments of gum tissue. Pyorrhea, if neglected, becomes offensive and loathsome, and causes loss of teeth. Gum-waste or recession progresses slowly without any painful, disagreeable or offensive feature, and never to the extent of loss of teeth. Pyorrhœa can be treated and cured as surely and effectively as other diseases, but the loss of alveolus cannot be restored by any process of treatment, nor can the gum ever be reunited to the teeth as before separated by pyorrhea; but with proper treatment can be made healthy and to fit closely to the teeth and around the necks of the teeth, so that foreign matters will not be forced between the gum and teeth under ordinary usage, that much can be accomplished and nothing more. To talk about restoring alveolus to roots of teeth after having been absorbed or destroyed by disease, slow in progress, is leading astray. Whenever the alveolar process has been destroyed by and through a diseased condition of the gum, or by natural process of absorption. it is gone and gone for ever, no return to be looked for. Whenever a tooth has lost by pyorrhea three fourths of its alveolus support. it should be extracted, for the remaining alveolar support is not sufficient to hold the tooth firm in place during the process of masticating food. A loosened tooth in the alveolar is a local irritant and a perpetual source of annoyance and will keep the gum in an abnormal condition.

Some dentists contend that the alveolus must be scraped, chiseled or burred away before the disease can be checked. During a practice of thirty-seven years, and a part of the time making a specialty of this disease, I have never met with more than two or three cases that required the removal of any portion of the process and in those cases I would have preferred to treat by direct application of pure sulphuric acid, (not aromatic sulphuric acid, as some advise), but the patients lived in the country and could not return promptly for treatment. In removing deposits from the teeth, I always try to avoid touching or interfering with the alveolus as much as possible. When the deposits have been thoroughly removed and the gums properly treated, the alveolus will soon assume healthy action and perform normal function.

The alveolar process in pyorrhoea is never affected only as the effect of a cause, a diseased condition of the gums. This idea does not accord with the popular opinion of the day, but it is conservative and accords with reason and common sense and can be a fact nevertheless.

This is no new disease, possibly it commenced with Adam and has prevailed through all generations to the present, and is no

worse now as a disease than it was hundreds of years ago, but there has never been much said about it until the past ten or fifteen years. I recollect distinctly far back in my boyhood days, fifty years or more ago, of several parties who lost many of their teeth that seemed to be perfectly sound; they would loosen gradually and drop out, or could be easily taken out with the fingers, as is the case now. Was the loss of teeth under such circumstances, that far back, caused by scurvy, as the disease was then termed, or was it pyorrhœa alveolaris as it is now called? And if there is a difference, what is it and how shall it be recognized? The thing important and most important is to know how to treat and cure the malady. never know the cause of the disease nor be able to prevent continuation of it. nor how far back to go for first evidence of its existence, but we can treat and cure it. That is our province and duty; let us faithfully perform it to the best of our ability with the light we have to direct and guide us, and advise as best we can for the good of our patients, their comfort and health. Nothing more can be required of us. To learn how to check disease and mitigate suffering should be the zenith of our professional ambition. say we must go to the root of the trouble and find out the cause before we can treat successfully; very absurd. Who knows the cause of measles or typhoid fever? Yet there is treatment and cure. and so it is with pyorrhoea. So far no one knows the cause, but we can treat and cure it as effectually as many other diseases, and when we have done that, we ought to be satisfied and so ought our Some advise to follow up cure with after treatment. Sometimes it is requisite, but not in the majority of cases. ing the disease I never lance or excise any portion of the gum, matters not how great the congestion may be, nor to what extent the festoons have extended. It was an old feature in practice many years ago, but never was of any benefit towards effecting a cure. When a cure is effected, give definite instructions to patients as to regular use of tooth brush, tooth pick, etc., and to keep the teeth in a cleanly condition daily, and trust to nature to perform its offices rightly and favorably as you would in any other case of disease treated and cured.

Pyorrhœa alveolaris, as the disease is termed, is in my judgment a local trouble, and not constitutional or transmissible as many contend. And it is, strictly speaking, a disease of gum tissue and not of the alveolus. The alveolus becomes involved only after the disease has made considerable and definite progress, hence only secondarily effected and wastes away through the agency of un-

healthy matters generated in the gums. It yields readily to local treatment, and, when cured, is cured beyond doubt or questioning, but like other diseases, there may be a return of it. "Like causes producing like effects," then treat again if called upon and repeat treatment as you would in any other abnormal state of any organ or part of the human body.

Pyorrhœa is no respecter of persons, old and young, (seldom below the age of eight or nine), rich and poor, white and colored, male and female, are all liable to be troubled with the disease, some more, some less. I have treated many cases for children not more than nine years old, (but have never seen with children a case far advanced,) and onward to pass three score and ten

There is one peculiarity about the disease. It seems to produce a serious effect upon some constitutions and no unfavorable effect I have known persons to be troubled with whatever upon others. the disease for fifteen or twenty years, to the extent of loss of many teeth, and during the entire time enjoyed good health, ate heartily, slept soundly and never suffered a moment from indigestion. There are many such cases. Then I have known persons to experience great suffering, extreme physical debility, nervous prostration, dyspepsia, etc., during the continuance of the disease, and as soon as treated and cured, all distressing and unfavorable symptoms abated and in a few weeks the person would feel and look like a different being. I have in mind two gentlemen who were about equally affected with the disease (well marked typical cases) for a number of years, eighteen or twenty, both enjoyed excellent health and perfect freedom from indigestion, could eat heartily and with a relish great variety of table fare at all times without discomfort. One was a farmer by vocation and about fifty-five years of age, very energetic and a laborious worker, and subsisted mostly upon substantial plain food in large quantity, and he used tobacco, chewed and smoked excessively. The other was a business man, lived in town, was forty-eight years of age, was rather indolent, liked to indulge leisure, was fond of high living, liked a variety of rich diet, delicacies, &c., never used tobacco, was equally healthy as the first; both were strictly temperate as to use of alcoholic drinks. One was reared and lived in a low flat, malarial country; the other reared and lived in the hill country or high-lands, free from malaria. was light complected with delicate features, the other dark complected with coarse, strong features. Both had lost lower front teeth and several bicuspids from the effects of the disease. never used a tooth-brush, had sound teeth, not a decay visible. The

other had used a brush occasionally until gums became diseased and sensitive, but never afterwards and had scarcely a sound tooth in his mouth. Neither had any recollection of parents or any members of either family ever having suffered with such a disease and loss of Now the question arises, was the disease in either or both cases constitutional, inherited, received through transmission, or simply local, and did the same cause prevail to produce the disease in both cases? Who can decide? And what matters it, if the cause is not comprehended? Both cases were treated with the same remedy, sulphuric acid, and effectually cured. Multiplicity of remedies are of no avail in this disease. I have for thirty-seven years confined my practice to one line of treatment, but have at various times experimented with various remedies that have been suggested, but have never accomplished as good results as with my long tried and favorite remedy, pure sulphuric acid, diluted to suit respective In the incipient stage of the disease with children or adults, the simple application of sulphuric acid and pulverized pumice with a suitable tooth-brush is all that is requisite for a cure. The disease further advanced to the formation of deposits upon the teeth requires additional treatment. The first thing to be done is to remove with appropriate, rightly shaped, smooth edge instruments (scalers) every particle of deposit; in this operation great care should be observed, for the smallest particle left adherent to the teeth will, if it comes in contact with gum tissue, prove detrimental and a great hindrance to a cure. If there is neglect in this feature of the treatment a cure cannot be effected; matters not how many remedies be administered, locally or otherwise. I have never yet met with a case, in which I realized necessity for internal remedies. It is a disease which, when well advanced, will not admit of mincing treatment, but must be dealt with heroically and without fear of discomfort to patient. You must start right and push treatment forcibly regardless of a little hurt. No necessity for being rough, but persisently forcible for effect in every effort from first to last in treatment is all important and compensates, both patient and operator. I specify the use of smooth edge instruments for removal of deposits, for I contend that deposits should never be removed with sharp edge instruments as was the old custom, and is the custom of most practitioners in this day of reform and progress. It is, in my opinion, bad practice and unjustifiable to apply sharp edge scalers below the enamel for removal of deposits; with sharp instruments it is utterly impossible to determine definitely when all deposits are removed. If the surface of teeth under the gum is scratched or scarred with a

sharp instrument, it will serve as a local irritant to the gum, and the gum cannot be restored to a normal state until the cause of trouble is removed; therefore the importance and value of smooth edge scalers. After removal of calcareous deposits and all foreign matter from the teeth, I then brush the teeth thoroughly with a small tooth brush, using sulphuric acid and pulverized pumice. I generally shorten the brush by cutting away several rows of bristles. and cut out every other row, so that every irregularity of tooth surface may be reached and polished by the brush and pumice. The acid will find its way where needed, around the teeth and into the deepest pus pockets. The pumice serves only to cleanse and polish the crowns and necks of the teeth and as far down the roots as the bristles of the brush will reach. I vary the strength of the acid to suit respective cases, seldom use it stronger than one of acid to five of water, nor weaker than one to thirty, and in a large majority of cases do not have to repeat application. Care should always be observed to see that the acid permeates well into the pockets around the teeth. After the use of tooth brush, a camel's hair pencil brush may in some cases, be used to advantage in applying the acid around the teeth. There need not be any timidity in the use of sulphuric acid on the teeth and gums if properly diluted. No harm can or will arise from use of it. Some cry out against it, but it is from ignorance and want of experience in the use of the article. A very prominent member of the profession in the city of New York proclaims for aromatic sulphuric acid, and has gone so far as to say the aromatic properties possess the merit for cure, or words to that I have tried it faithfully and failed of best results, and so will any one. The pure sulphuric acid, properly diluted, is best. Experience is our best teacher. Faithfully experiment and hold fast to that which proves best is a conservative and safe line for practice.

After the application of acid I forbid the use of water for rinsing the mouth for some minutes, as I desire the acid to have full effect upon the gums and particles of deposits dislodged, and possibly some small points still adherent to the teeth. I then apply finger pressure to the gums and press firmly to the teeth, and instruct patients to do likewise several times daily, for several days, immediately after using brush, the same that I used in applying the remedy, it being better suited to the condition of teeth and gums than the majority of tooth brushes on the market. I advise the free use of the brush daily, two or three times a day, directly following treatment, to keep the margins of the gums irritated and to produce or invite healthy granulation; also to prevent the accu-

mulation of foreign matter on the teeth below the margin of the gum. For several days after treatment the gums may bleed on application of brush, but, all the better, it is desirable. I urgently request finger pressure to follow use of the brush; it promotes absorption and flattens and hardens the gums. The effect must be witnessed to be rightly appreciated.

On the second or third day after removing deposits, I make a careful inspection to see if any points of deposit have been overlooked; and if any are found, I am careful to remove it. This is a very important feature in the treatment, and should never be neglected. I have for some months past followed the treatment, after rinsing of mouth, with a free application of campho-phenique (full strength) to the gums, with favorable effect. I cannot say that I think it aids cure, but it seems to abate acute sensation and is unquestionably very soothing to the gums. Patients like the application and frequently ask for reapplication of it before leaving the chair.

In a large majority of cases a cure can be effected in from five to ten days if instructions are rightly carried out.

In regard to treatment for sanguinary or serumal deposits, the important and first step is to get at and remove, if possible, the deposit, all of it. In the event that the deposit is so located that you cannot get at it with instruments (such cases do present now and then), then remove the tooth and get rid of the trouble; it is best for the patient. I have frequently persisted in treatment for months, then had to extract. After extraction no further treatment is necessary; the gum will soon assume healthy action.

As concerns treatment for gum waste or recession of the gums, I do not feel authorized from experience to suggest treatment, for I cannot say that I have ever had definite evidence of having checked progress of the disease by any line of treatment pursued. I sometimes advise the use of a mouth wash composed of pure apple cider vinegar, one part; Jamaica rum, one part; strained honey, one part; and water, four parts. To be used as follows: Take about a desert or tablespoonful into the mouth once or twice daily, and apply brush forcibly, especially on parts most affected. The same wash and practice is sometimes requisite, as after treatment in some cases of pyorrhea, particularly when the gums need stimulating and toning up, mostly with persons of advanced years.

It is important in the treatment of any disease to be careful not to try to do too much. Over treatment is worse for a patient than no treatment.

A tooth brush for daily use and to be effective should be shorter and narrower than the majority of brushes on the market, and the rows of bristles should be few and far apart, not more than three or four rows crosswise the brush, with space between rows, from a quarter to three-eighths of an inch. A compact close-bristle brush is objectionable, and ordinarily will do more harm than good to the gums, and in no way benefit the teeth. The object of a brush is to cleanse the teeth, every division of them above gum margin, if possible; hence the necessity for much space between the rows of bristles.

In this paper I have endeavored to make a plain statement of facts in relation to my treatment of pyorrhœa alveolaris, Riggs' disease, scurvy, or whatever it may be termed, with a desire that others in the profession may be induced to treat the same as I have been doing for many years, with good results and satisfaction to myself and patients.

The thousand and one remedies written about and proposed for treatment of pyorrhea alveolaris I have never realized any necessity for, with those I have experimented with I have found inefficient, and with them failed to accomplish best results; therefore, persevere in the use of *sulphuric acid*, regarding it harmless and reliable and more certain of effecting desired results than any or all other remedies.—Am. Jour. Den. Sci.

[We print the above excellent article by special request.]—Editor.

THE MYSTERY OF A COURT DENTIST.—A sensation has been caused by the announcement that Herr Schott, the court dentist, of Vienna, is missing. Search has been made in all directions, but no trace of the missing man has been found. The police authorities believe that Herr Schott has been murdered and robbed.

STATE DENTAL LAW.—At a called meeting of the Maryland Board of Dental Examiners, held May 25, at the office of the president, Dr. A. J. Volck, 338 North Charles street, Baltimore, the opinion of Attorney-General Poe was received regarding the application of the State law relating to dentistry. He holds that it is the duty of the Board to examine all persons who apply. Persons to whom the law applies practicing without certificates render themselves liable to the penalties prescribed by the law.

HYDROGEN PEROXIDE IN CONTAGIOUS DISEASES.

CHOLERA-YELLOW FEVER-TYPHUS-TYPHOID FEVER.

BY CYRUS EDSON, M. D., NEW YORK.

Commissioner of Health, Health Department, New York City.

It is not my purpose in this short article to laud the merits of hydrogen peroxide in the treatment of diphtheria or of scarlatinal angina, for in the cure of these diseases the remedy in question has no equal. Its efficacy cannot be justly questioned.

Other more competent observers than I have called attention to the wonderful effect of this agent in the treatment of ulcers, and ulcerating surfaces. The splendid results obtained by numerous distinguished physicians and surgeons through the use of hydrogen peroxide in various diseases are well known to the profession.

I desire, however, to emphasize in a few words the fact that we have in H. O. a powerful antiseptic agent which may be administered without harm to the human system, and by means of which the alimentary canal can be more thoroughly disinfected than by any other agent in our present range of therapeutics. In other words, there is no other antiseptic that will effect the amount of germ destruction in the alimentary canal without inflicting injury.

This is true for two reasons:

First, hydrogen peroxide has no toxic properties and consequently, may be administered in larger amounts than can the toxic antiseptics.

Second, hydrogen peroxide ranks higher as a bactericide than does any other non-toxic agent, and indeed than do most of the toxic ones.

The elaborate reports made by such men as Paul Bert and Regniard, Baldy, Gibier, Pean and Larrive prove these two facts as conclusively as they can be proven.

It logically follows that we have in hydrogen peroxide a curative agent from the use of which we may expect good results in cases of disease arising from germ infection of the stomach and bowels.

In this connection, one fact must be borne in mind: peroxide of hydrogen decomposes rapidly in the presence of organic compounds. We must consequently administer the drug rather freely in order to produce the best effects, and on this account also, free irrigation of the lower intestines as devised and recommended by Dr. Elmer

Lee, of Chicago, (Medical Record, December 17th, 1892), is adapted to effect the greatest good.

The paper by Dr. Lee, to which I have just referred, details the results of his experiments in the treatment of Asiatic cholera at St. Petersburg last year, and advocates the intestinal irrigation for the cure of the disease.

It is impossible to read this able article and not be convinced that the methods advanced are in the highest degree scientific and logical.

The intestinal irrigation is accomplished by means of a soft rubber tube, one metre in length and of suitable size to be introduced into the rectum, in front of the promontory of the sacrum, into and up through the sigmoid flexure and into the descending colon. This tube, which is connected with a reservoir, should not be too small nor too large, in order to facilitate its introduction through the folds of the sigmoid portion of the lower bowel.

In fact, the greatest difficulty to be encountered, is to successfully pass the tube in front of the promontory of the sacrum, and enter it into the sigmoid flexure. The tube should be of proper firmness to prevent it from bending or buckling upon itself when the end (which in all cases should be rounded) comes in contact with the obstructing folds of the intestine.

Dr. Lee reports very satisfactory results from a thorough irrigation of the intestines with warm water containing a small proportion of liquid soap made of vegetable oil, potash, and glycerine, in connection with peroxide of hydrogen (medicinal) as an internal treatment.

By following Dr. Lee's system of irrigation of the intestinal canal, with a large amount of the above solution (two or three gallons), the whole amount of infected matter which is present in the intestinal canal is mechanically carried away; after which, by a second thorough irrigation of the intestinal tract with one or two gallons of warm water containing four per cent. of peroxide of hydrogen (medicinal), any comma-bacilli which may remain in the intestinal tract will be readily destroyed.

In addition to irrigation or washing out of the intestines, Dr. Lee administers internally peroxide of hydrogen, two ounces diluted with eight ounces of distilled water, in cupful doses every two hours. The addition of distilled water is made in order to increase the bulk of fluid in the stomach.

It is my opinion that this treatment will prove to be "par excelcellence" the treatment for cholera nostras, dysentery, typhus and typhoid fever. In the latter disease hydrogen peroxide has already been tried with beneficial results, administered by the mouth.

For yellow fever, hydrogen peroxide must be considered a specific. Gibier has shown that this disease is due to micro-organisms that infect the intestines, and basing treatment upon this fact, solutions of mercuric bichloride have been advocated for intestinal irrigation, and large doses of the drug have been exhibited with good results.

But H_2O_2 is a far safer and much more efficacious remedy. It has been demonstrated that the germicidal power of a solution containing two ounces of H_2O_2 (medicinal) to a pint of water is equivalent to a $1\frac{1}{2}$ per cent. solution of bichloride of mercury. But it is evident that we cannot use the latter without killing the patient, while the former solution is harmless.

In the treatment of yellow fever peroxide of hydrogen should be injected into the rectum in the proportion just described, three times daily, the water being warm.

Distilled or boiled water should always be used to effect the dilution of hydrogen peroxide, for the reason that water containing organic matter slightly weakens the strength of the peroxide, a certain amount of the agent being decomposed.

This brings to mind another:

Hydrogen peroxide is a safe and certain water purifier. When added to the contaminated water it instantly destroys any microorganisms that the beverage may contain. The proportion necessary to effect this is 3 per cent.

I have used a solution of H_2O_2 for washing out the stomach through the syphon tube (lavage) in cases of gastric catarrh, with most excellent results.

The therapeutic range of hydrogen peroxide is daily enlarging; a comparatively new remedy, it has already won for itself a place in the foremost ranks of our really valuable medicinal agents.

The advance of medicinal science is necessarily slow, because it must follow in the wake of the development of allied sciences upon which it depends for its resources.

Chemistry has only recently given us hydrogen peroxide in its pure form, and to the efforts of Charles Marchand, of New York, more than to any other man, do we owe this invaluable remedy-A host of imitators have deluged the market with substitutes for his hydrogen peroxide. I have found his preparation facile princeps.—The Doctor of Hygiene.

News Items.

On to Chicago!

Dr. W. R. Holmes spent last week in Chicago.

The Columbia Dental Club was opened Saturday evening, May 20th, at 300 Michigan avenue.

Henrietta Herschfeld, a woman graduate of the Philadelphia College of Dental Surgery, is assistant court dentist of Germany.

Dr. Francis Peabody has removed his office to 103 E. Chestnut St., Louisville, Ky.

The new address of Dr. M. P. Beecher, of directory fame, is 225 Warwick St., Brooklyn.

The American Medical Association has a section on Dental and and Oral Surgery, but the British Dental Association has no representation in the British Medical Association.

The American Aluminum Company is erecting a plant near St. Louis, and expects to turn out more metal than all the plants in the world combined.

TAKES AN OVERDOSE OF COCAINE.—George Raber, 30 years old, a dentist, of Paragon, Ind., took an overdose of cocaine on June 15, and next morning was found dead in an alley.

Mrs. J. A. Robinson, wife of Dr. J. A. Robinson, the oldest practicing dentist in the United Sates, died at her home in Jackson, recently, after a lingering illness, aged 84 years.

There are now two new dental colleges in Atlanta. The Dental Department of the Southern Medical College, with Prof. L. D. Carpenter as dean, and the Atlanta Dental College, with Prof. W. C. Wardlaw as dean.

A Miss Annie Grant Hill, of River du Loup, Province of Quebec, has been admitted to the practice of dentistry and is to practice in Montreal. Miss Hill is the first lady dentist in that province, and took high honors in her examination.

Mrs. Charles H. Fisher, a prominent North Lansing woman, died in the dental chair June 3. Dr. Ralph H. Clark and Dr. Frank N. Thomas treated her at her house, giving her chloroform to ease the pain. She was made unconscious and six teeth were extracted. Mrs. Fisher was a daughter of City Attorney Snow, of Jackson, and was about 27 years old. The coroner is making an investigation.—Special from Lansing, Mich.

Dr. B. B. Davis, of Athens, Ga., is said to have invented a novel attachment to bicycles, for which he says he has been offered fifty thousand dollars. The invention consists of an attachment to hold the wheel up when at rest.

Another instance in which the honors of public office have been given to a dentist. Dr. T. E. Chambers, of Montezuma, Ga., was recently elected to the mayoralty of the city. Dr. Chambers is a man of sterling ability, professionally and otherwise, and will make an excellent officer.

A NEW DENTAL COLLEGE.—The new Cincinnati College of Dental Surgery is expected by the incorporators to open its doors in the near future. The building at 209 West Court street has been secured, and a number of appointments are about to be made. Dr. Junkerman will occupy the chair in the department of operative dentistry and dental pathology, and Dr. J. W. Leahy, of Harrison, O., has been offered that of prosthetic dentistry and dental metallurgy. The regular term of the college will be from October 2 to April 1 of the succeeding year.

THE OPERATION PROVES FATAL.—W. H. Livingston, one of the most extensive merchants of Iowa, died at the Emergency Hospital last week, as a result of a surgical operation made to relieve an abscess in the jaw. He was a resident of Sioux City and a large dealer in dry goods. Mr. Livingston came to Chicago three weeks ago for treatment, and failed to rally from the operation performed a few days ago. He leaves a wife and two grown sons, William and Henry Livingston.

SNUBBED AGAIN.—At the late B. D. A. meeting at Birmingham, England, the Association decided not to accept the courteous invitation of the Dental Section of the Eleventh International Medical Congress to attend the meeting in Rome. Two or three self-appointed censors are running things with a high hand in "merrie Old England" now, but wait "yet a little," and they will want help of some sort to bridge over a chasm and then we shall see new hands at the helm. For such a short session (three days) such an amount of intolerant insolence and discourtesy was never known to have been exhibited by any scientific or professional body, toward similar organizations engaged in humanitarian objects. We feel certain that if the members of the B. D. A. understood things more correctly, they would flock to Chicago and Rome like frightened sparrows seeking a haven.—Dental Review.

AMERICAN DENTAL ASSOCIATION.

DENTAL EDUCATION, LITERATURE AND NOMENCLATURE.

BY DR. LOUIS OTTOFY, CHAIRMAN.

"Summary of	Report,	Education,	Enumeration	of Colleges and
Graduates."			•	

Total number of Colleges, 1892	. 38
Total number of Graduates, 1892	
Compared with total number of Graduates, 1886	. 503
Showing increase in six years of	. 980

Ten of the Colleges enumerated graduated less than ten students each; five graduated from one to five each.

"Several of the Colleges mentioned were quite unworthy of enumeration, and suggest once more the thought that the A. D. A. could not do a more acceptable work than devise some means for preventing the free and wholesale chartering of so-called educational institutions in the several States. As it is now, there is nothing to prevent any three or more men from chartering, in the State of Illinois, for example, an institution for the exhibition of brass monkeys and calling it a College.—Dental Review.

Sig. Antiseptic for root canals .. - Dr. A. C. Hewitt.

An admirable, safe, efficient cleanser of instruments antiseptically is hydronaphthol. I am indebted to Prof. Harlan for the suggestion that has led to the use of this valuable drug:

R Alcohol.....zii

Hydronaphthol....ad.....grs.xx
M.

Put into a wide-mouthed bottle—as a quinine bottle. Dip your instrument, whether excavator, forceps, searcher, or pyorrhœa blade, into the liquid, and lay away to dry. The most delicate steel will not be tarnished by it and it needs no wiping.—Dr. A. C. Hewitt.

THE

Southern Dental Journal and Luminary.

A MONTHLY PUBLICATION

DEVOTED TO THE INTERESTS OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. Johnson, 306 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to Drs. W. R. Holmes & Mason, 556 Mulberry St., Macon, Ga.

Editorial.

THE recent action of the British Medical Council in rejecting the diplomas from the schools of Harvard and the University of Michigan refusing longer to register them under the act of 1878, will, doubtless, cause much comment from educational circles. singling out of these two schools from the rest, according them privileges which were not granted others equally entitled to receive them, and registering them without further examination on an equal with the Licentiate degree of England, has been the cause of much general dissatisfaction on both sides of the Atlantic. The twentythree dentists registered under this act (not all true Americans), have been accused and damned for all the quackery, charlatanry and degrading advertising that has been practiced in the United Englishmen are supposed never to resort to such degrading practice. It is always "those fellows who flock over here from Harvard and Michigan, half educated, half civilized scallawags, that resort to these nefarious schemes to gain patronage." These twenty-three dentists must have been wonderful men. They must have been "hustlers" to have done all the devilment of which they have been accused. If our English confreres will look a little closer they will find that all the signs and door plates in the great cities of England, bearing the name "American Dentist," are not hung out by true American citizens, and the repealing of this section of this act is a good thing for England and the reputation of American dentistry. It will stop Englishmen from coming to this country, obtaining the American degree and going back and advertising themselves as American dentists.

As Dr. Lord says in his reply to Mr. Quinby on American Dentists, "unfortunately, I think, he has found in his well arranged list of professional sins committed by quacks and charlatans, masquerading as American dentists, an excuse for a rather wholesale denunciation of American dentistry at large. But we find in practical life the most successful men have the greatest number of imitators; the best artists, pictures are copied; the most pleasing architectural results are followed in the reproduction of cheaper and less meritorious works; and because of that never failing homage which men of all countries and professions, with native shrewdness pay to success and skill. Were the standard of practical dentistry as high in any other country as it is in America, quacks and non-professionals would now be masquerading as Russian dentists or Swiss dentists, or begging Mr. Quinby's pardon, as English dentists."

A uniformity of education in the two countries will probably never be reached, owing to the prevailing differences of opinion in regard thereto. Neither country would be willing to accept the certificate of the other as evidence of qualification to practice. The States do not accept them from each other; neither would the Licentiate degree of England be recognized in most of the States of the Union without an examination from their State Board.

If this state of affairs is not as it should be, it is undoubtedly the way it now stands, and is as fair for the one as the other. If either should desire to practice in the other country, they must first satisfy those in authority that their qualification is up to the standard required in that country. And let us make the standard high.

CLINICS AND EXHIBITS AT THE WORLD'S DENTAL CONGRESS.—Operative clinics will be given in the rooms of the Chicago College of Dental Surgery, 100-102 Michigan avenue. Prosthetic clinics in the rooms of the Northwestern University Dental School corner Indiana avenue and Twenty-second street. Dental exhibits in the rooms of the American College of Dental Surgery, 479 Wabash avenue. Microscopical and lantern exhibits in the Memorial Art Palace, Michigan avenue and Adams street, Lake Front.

THEY EXPELLED HIM.

The North Carolina State Dental Society has expelled Dr. C. C. Sapp for violation of the code of ethics by advertising painless extraction of teeth and cheapest work.—Atlanta Constitution.

A few examples of that kind would be a good thing for the dental profession of Georgia. Of all things cheap, a cheap John dentist is the most contemptible—not only degrading himself, but dragging down an honorable and useful profession to the level of a trade or traffic.—Gainesville Eagle.

We heartily endorse the sentiment of our neighbor, and recommend the example of North Carolina in putting down and out empirics and charlatans, who are doing so much to degrade this beneficent profession as well as destroying the teeth of those who are foolish enough to trust their interests in this particular to a "cheap John," whose only claim to patronage is "cheapness."—Industrial News.

The above clippings were sent to me by a subscriber, who states that a leading daily paper had refused to publish them, except as an advertisement, on the grounds that the "cheap Johns" were the only dentists who ever advertised with them; consequently they could not do anything that would discourage the practice. When a wealthy newspaper gets so politic that, for fear of losing a few paltry dollars, it refuses to advocate the side which tends to the upbuilding and upholding of the honor, dignity and respectability of everything, whether it be professional, religious or political, its own claim to respectability is getting pretty low in the scale.

A man who will deliberately and premeditatively plan and pursue a course that will pull down and degrade an honorable profession, that it has taken years of patient toil and self-sacrifice on the part of the old pioneers to establish and build up, has no claim to recognition among an honorable and select body of men, and a society can do no better than to rid itself of such material as quickly as possible.

WE reprint from the American Journal of Dental Science in this issue a most excellent article on pyorrhea alveolaris by Dr. B. F. Arington. We hope it will be carefully read and appreciated by the patrons of the JOURNAL AND LUMINARY. Dr. Arington has been investigating and experimenting in the treatment of this disease for years, and has been very successful in its cure.

W. C. WARDLAW, M. D., D. D. S.

Dr. W. C. Wardlaw, of Augusta, Ga., has recently been elected by the Trustees of the Atlanta Dental College to the Professorship of Anatomy, Physiology and Oral Surgery, and by the Faculty as Dean of the College. This is a deserved compliment to a worthy man. Dr. Wardlaw graduated as M. D. at Charleston, S. C., in 1861; as D. D. S., at Philadelphia, 1866, and again at New York in 1868. He was President of the Saluda Dental Society in 1869; has served as President of the South Carolina and Georgia State Dental Societies of the Southern Dental Association and Augusta Dental Society. Served as a member of the Georgia State Examining Board for a number of years; was one of the Council of the Ninth International Medical Congress and Secretary Abbeville District Medical Society and Augusta Academy of Medicine; was a Trustee of the Baltimore Dental College and is a member of several important committees of the World's Dental Congress. Thus it will be seen that Dr. Wardlaw has spent many useful years of his life in the service of dentistry, and we are glad to see this exhibition of appreciation of his true worth on the part of the Atlanta Dental College in electing him to the highest office in their gift.

Some of the members of the British Dental Association "got on their ear," so to speak, and refused to send delegates or have anything to do with the World's Dental Congress, because a circular had been sent out in which the claim was made that "scientific dentistry had its birth in the United States of America, and that country has the proud distinction of having organized the first school for the teaching of dental science." "The truth is mighty and will prevail," and through the proclaiming of these facts to the world may fall heavy, and grate on the sensitive auditories of our British brethren, we are proud of our achievements and rights to claim these honors, and we like to tell it and talk about it, and we still intend to proclaim it on every fit occasion.

We are glad to be able to say, however, that the dental profession of Great Britain was not voiced by this little "handful of sensitiveness," and we expect a large attendance at Chicago notwithstanding.

Come across the "Duck Pond," brethren, and we'll give you such a welcome as you never have known of, and send you home laden with more "practical Yankee ideas" than you can put into practice in a life time. Come. You will never regret it.

NEWS.

THE South Carolina State Dental Society meets at Columbia, August 8th, 1893.

THE Virginia State Dental Society meets at Charlottsville, August 8th, 1893.

THE American Dental Association meets in Chicago Saturday, August 12th, 1893, at 10 o'clock A. M.

THE National Association of Dental Faculties meets at Dental Club Building Chicago, August 10th, at 10 o'clock A. M.

THE Southern Dental Association meets in Chicago, August 11th, 1893, at 10 o'clock A. M.

THE Columbian Dental Congress convenes August 14th.

THE World's Columbian Dental Congress to be held in Chicago, August 14th to 19th.

NATIONAL ASSOCIATION OF DENTAL EXAMINERS.

The twelfth annual meeting of the National Association of Dental Examiners will be held in the house of the Columbian Dental Club, No. 300 Michigan avenue, Chicago, Friday, August 11th, 1893, at 10 o'clock A. M. Attention is called to the following resolution, passed August 5th, 1891.

Resolved, That the various State Boards of Dental Examiners be requested each year, in season for the annual meeting, to make to the Secretary a written report of their examinations, accompanied by detailed or tabulated statements.

COLUMBIA DENTAL CLUB.

The dentists of Chicago have organized the Columbia Dental Club for the entertainment of dentists visiting Chicago during the continuance of the exposition. They rented a house at 300 Michigan avenue, about four squares from the Art Palace on the lake front, and it will be kept open daily. Dentists who contemplate a visit to Chicago may have their letters addressed in care of the club. The profession in Illinois will furnish the club house, and those who contribute \$15,00 will be entitled to a full paid non-assessible membership for the six months. For particulars address Dr. A. W. Harlan, 1000 Masonic Temple, Chicago.

FINANCES.—Desiring that every reputable member of the dental profession shall be identified with the Congress,

Resolved, That a payment of ten dollars (\$10.00) shall entitle one to the Transactions and to Membership, if eligible;

That a payment of twenty dollars (\$20.00) shall entitle one to the Transactions and to Membership as above, and to the Commemorative Medal;

That a payment of thirty dollars (\$30.00) or upward shall have all the advantages of the twenty-dollar (\$20.00) subscribtion, and also recognition as a contributor to the financial success of the Congress;

That any student presenting a certificate from the Dean or Secretary of a reputable Dental College shall be entitled to Student Membership, and also to a copy of the Transactions, on the payment of five dollars (\$5.00).

THE Columbian Dental Club was opened Saturday evening, May 20th, at 300 Michigan avenue, Chicago. There were about 100 present. There are sixteen rooms in the house devoted to club purposes, a cafe has been opened. After June 15th there will he an "Information bureau." Dentists can have letters addressed in care of the club. It is hoped that many dentists not now enrolled as members will send their names to the Secretary, J. W. Wassall, 208 Dearborn avenue.

THE Southern Dental Association will hold a business meeting in connection with Columbian Dental Congress, in the Kindergarten Hall, No. 10 Van Buren St., Chicago, commencing Friday morning, August 11th, at 10 o'clock. A full attendance is desired that this important body may be well represented at the Congress. See letter from the Recording Secretary in this issue.

FARMVILLE, VA., July 14th, 1893.

Messrs. W. R. Holmes & Mason, Macon, Ga.:

DEAR SIRS.—Accept my thanks and congratulations upon the great improvement you have wrought in the JOURNAL, both in matter and typographical execution. I had almost despaired of ever seeing a creditable "Southern Dental Journal," but feel proud of the monthly since it passed into your hands as publishers.

Yours truly,

W. W. H. THACKSTON.



Correspondence.

COLUMBIAN LETTERS.

FROM C. O. LUMBUS.

Editor Southern Dental Journal:

I am glad indeed to see that you are calling the attention of the profession to the meeting of the Columbian Congress. One of the main reasons for my writing these letters is to draw attention to this meeting, which is to be held during the World's Fair at Chicago, commencing Monday, the 14th day of August, and embracing all of that week, which will be a feast of good things. From time to time we can tell of the many things of interest to be seen and taught at this Dental Congress. The Executive Committee had another important meeting the 27th and 28th of January at Chicago to finish up as far as they could the work that has been assigned them, in organizing and getting under headway this great meeting. Many will never realize the work that has been done by these men, who have so unselfishly devoted their time and substance to create and put in motion the "World's Dental Congress."

No little credit is due to Drs. W. W. Walker and A. O. Hunt. the chairman and secretary of the committee, for their laborious services, which they have given so cheerfully to bring success to the undertaking, which will confer honor upon our beloved profession. and to every dentist who takes a part in it. Now some of the journals are printing the claims of "Jersy," and publishing testimonials to secure the honor of originating the idea of this Dental Congress for the New Jersey Dental Society. New Jersey is a great State, and produces as fine dentists as you find in the United States, and they generally "get there Eli." But she is not entitled to the honor of originating this congress, for the writer has a letter from Dr. Harlan, of Chicago, who advised him, as well as others (including himself), not to accept places of honor on committees of the International Medical Congress' Dental Section, that met in Washington in 1887. He wrote as far back as the early part of 1886, stating that the Medical-Dental Section would not be a true representation of dentists, and we would soon try and have a real Dental Congress, composed entirely of dentists. A good deal was written about it in the first numbers of the Dental Review about that time, in 1886.

dentists refused to occupy the places of honor that were assigned them, but did afterward lend their aid and presence to make the Dental Section a success, which assuredly was the most successful one of that International Congress. The official promulgation of this Dental Congress was first brought to light at Atlanta, Ga., July 1890, and agreed to by the American Association at Excelsior Springs, Missouri, in August of the same year; organized by them jointly and sent forth on its great mission to report at Chicago, 1893, to which the dentists of the world are invited to participate. What better advice could I give to the young men who are now coming into the ranks of the profession, from the various colleges all over our land, than to be certain to avail themselves of the benefits of this Congress, which, even to those who are just beginning, will be a post-graduating course, as well as to some of the old practitioners who are rusty and need very much a brushing up.

The time is passing away when we can hide our ignorance from an intelligent and deserving public; they soon catch on, and can quickly tell the worthy and true from the loud-mouthed charlatan. The man who expects to march in the procession will have to be up early and avail himself of all the opportunities that cross his pathway to maintain and hold his practice, after years of study and diligence in securing one. I well remember a circumstance that occurred in my early practice, which even at this late day in life, makes me smile when I think of it, how I got away with an inquisitive and talkative patient, upon whom I would not dare attempt it to-day. I had been practicing some five or six months, I suppose, was sitting one day in my office thinking of an old motto, "Labor and wait," and thought I was doing more waiting than labor, when an old maid, of about forty years, who was head man and quartermaster-general of her father's family, called, to engage my services to "fix the teeth" of the whole family. They were plain, clever and kind people, in good circumstances, which promised me some labor and good pay, and we agreed upon terms. She, I soon saw, prided herself upon being intelligent, well read, and had traveled somewhat, and was not backward in letting you know that she was no small potato and could spell culture with a big C. She was soon interested in my family affairs, wanted to know my genealogy for several generations back, and asked questions that were tedious, tiresome and tasteless. When I commenced to operate for her she wanted to know the use of each instrument, and "what for" it was used, the history of the different materials, etc. I had prepared some cavities which I was going to fill with amalgam. When she

renewed her questions by asking me over separately and individually the various ways of preparing the cavities and how I would fill them and the different ways of using the instruments, that would have utterly confused a three-years' course student, who had all his answers pat in a quiz room. She had worked me up to a point that I just wanted to "fix her," which I did thusly: "Madam, these are compound oval cavities, made in the posterior distal part or portions of the superior upper molars; which I will fill with metallic filings consisting of gold, silver and platinum, which I think after being well manipulated and amalgamated will be a suitable filling for the case." That was a mild stand off, and she waited some time before saving anything, and I thought I had her silenced, but when I poured out the amalgam into my hand, and began to add the mercury, she spoke up very quickly, and said: "That looks just like quicksilver and the white of an egg, mixed together to kill bed bugs."

That was a stunner, and my patience was about exhausted. Nothing but ignorance and youth was equal to the emergency. stopped and very deliberately looking her in the face, assuming the most dignified professional manner I could, said, "Madam, that is Hydrargyrum cum creta, which causes the amalgamation of the metallic flings." I saw that she realized that it was time for the doxology, for she would not show her ignorance by asking, "What was that?" Not being at the head of a baby farm she did not know what was chalk mercury. She never asked another question, and right there I am fully persuaded that I impressed her with my professional knowledge and gained her confidence and good will. She soon married and is now at the head of a family of her own, and I have held her friendship and patronage until this day. I find that as a general rule it is hard to convince young men just entering the profession, that the older men take or feel an interest in them. A great many are so conceited and have a notion that they know it all, have had so many more advantages than some of these old "Fogys," that they do not care to receive or think they need any advice from them. So it's seldom that we see that sympathy or social relations, or even professional regard among dentists that we do in the other professions.

Of this we will not write now, but perhaps may later, but I take the position, and believe that I will be upheld by the greater majority of observing men, that the young man just leaving college that immediately allies himself with dental societies, and goes to work in them and for them, with all his might, is the successful man of to-day. He may not be as brilliant, or have taken any college prizes, but if he will do his part, stick to his office, live and be the true professional gentleman that he should be, he will steadily climb to the top of the ladder; while these "smart Alecks" who can't learn anything from Dental Societies and never attend them, will in a few years fall far behind them, and you will frequently see them have signs, "Dental Parlors." "Palace Dental Rooms." painted in large letters that can be seen at a great distance, names in large letters in hotel registers, on large frames at public places, silk badges on inside of doors at prominent hotels, and juggling in various ways to secure a practice that will not come to such men and methods. I have noticed the course of many young men during my professional life, some that my heart went out to, and I hoped to see them achieve all their desires, fail right on these lines. Some I have known who left college with the highest prizes and stood brilliant examinations before State Examining Boards, have never darkened the doors of a Dental Association, since they left college years ago. They have come, they are going, and some have gone! Ignoble failures!

Our State meetings will soon come, all over our Sunny Southland. How glad I would be to see the last young Dentist, as well as some of the older ones, who have enjoyed the benefits, high standing and position of to-day that the profession receives, which has been achieved by a band of faithful men, who have stood at the post of duty during these many years to secure these honors, come up and join us, fall into line in the various State meetings, and prepare themselves to take our places, for it will not be a great while before "The places that now know us shall know us no more forever!"

COLUMBUS, GA., April, 1893.

[This letter was printed in the April issue of this journal, but so many mistakes occurred, owing to the inaccessibility of the printers to the editor at the time, that in justice to the author we reprint it, corrected, in this issue.—ED.]

Yours truly,

M. D. LANIER.



SYLVANIA, GA., July 1st, 1893.

Drs. W. R. Holmes and Mason, Publishers Southern Dental Journal and Luminary, Macon, Ga.:

GENTLEMEN.—The sample copy of the "JOURNAL AND LUMINARY" has been received, and I am glad to note the great improvement. It is indeed a credit to Editor and Publishers.

SOUTHERN DENTAL ASSOCIATION.

SECRETARY'S OFFICE, Decatur Ala., July 3, 1893.

Dr. H. H. Johnson, Macon, Ga.:

MY DEAR DOCTOR—Will you please insert in your next issue of The Journal that the committee on arrangements have selected the Kindergarten Hall, No. 10 VanBuren street, Chicago, as place for holding the business meeting of the Southern Dental Association, in connection with the Columbian Dental Congress. Time for meeting is Friday, August 11th, at 10 a. m., this being the nearest date to convening of the Congress that we could secure. Please insist on a full attendance, that the meeting may be a success, and also that the importance of the Southern Dental Association may be upheld at that great meeting with representatives from all the world. Allow me to congratulate you upon the success of The Southern Dental Journal and Luminary.

Yours fraternally,

S. W. FOSTER, Secretary.

CHICAGO, July 7th, 1893.

DEAR DOCTOR—From letters received from dentists in different parts of the country, I am inclined to think that there is a lack of information as to the expense of living in Chicago during the season of the World's Fair. Board and lodging were never more reasonable than now. Rooms can be had, where two are willing to room together, for fifty cents a day each. First-class rooms and accommodations can be had from \$1.00 to \$1.50 per day, when parties wish to room alone. The highest-priced hotels are entertaining people for \$5.00 per day, room and board. For twenty cents, in restaurants just outside of the fair grounds, will be furnished three eggs, a cup of tea or coffee, and all the bread and butter one wants. For thirty-five cents can be had a good, well-cooked steak, potatoes, tea or coffee, and bread and butter.

The boat, railway and street car companies are doing all in their power to furnish the best and cheapest transportation possible.

Of course there are a few catch-penny schemes, but they are not in connection with the responsible hotels or the fair. Considering the size of the exposition, the number is remarkably small.

I have made this investigation for the purpose of informing the dental profession of the exact facts concerning the expenses here, and would urge upon every one to remain as long in Chicago as possible. A month or six weeks can be spent very profitably in seeing what the world has done and is doing, and a longer time could be used to great advantage. This can be done by stopping at a moderate priced hotel.

The information I have given in this brief article may not be necessary to every one, but I am quite sure that many have been misinformed as to the expense.

Yours, cordially,

J. N. CROUSE.

ATLANTA, GA., July 17th, 1893.

Dentists and their friends, or Masons and their friends, who would like to have nice rooms engaged in a first-class hotel, at Chicago, to be occupied by August 10th and later, as desired, can by sending me their names, be supplied at the rate of \$1.50 per day, 75 cents for each person. Two persons in each room. Provided ten or more make the application to me by August 1st, 1893. Let me hear from you immediately. Yours truly,

DR. L. D. CARPENTER, 47½ Whitehall Street, Atlanta, Ga.

MACON, MISS., June 24th, 1893.

Dr. H. H. Johnson, Macon, Ga.:

DEAR DOCTOR—I have never been satisfied with the theories advanced in regard to the cause of the so-called Riggs disease, or "Pyorrhœa Alveolaris." I have been at work in a quiet way for the past few years trying to solve the problem as to the direct and only cause of this dreadful disease. I am about ready to express my views and risk my reputation (if I have any) and lay before the profession a theory never before advanced; a theory capable of demonstration, and one that will coincide with the pathology and results of the trouble. If agreeable, I would be pleased to present this theory through and by means of the SOUTHERN DENTAL JOURNAL, in the way of a paper.

I will state that my theory will prove the first cause of the disease, the only cause, and substantiate the fact that it is unavoidable and incurable. I have, in my humble opinion, by microscopical observation, discovered the direct cause of this trouble.

Yours very truly,

GEO. B. CLEMENT.

[This interesting paper, illustrated, will be published in August.—Ed.]

DELEON SPRINGS, FLA., June 20th, 1893.

Drs. W. R. Holmes and Mason, Publishers Southern Dental Journal and Luminary, Macon, Ga.:

DEAR DOCTORS—Enclosed find postal note for \$1.00, as subscription for SOUTHERN DENTAL JOURNAL AND LUMINARY until January 1st, 1894.

Since reading sample copy feel that I cannot afford to be without it. It is more in accord with my ideas of what a dental journal should be than any that I have seen.

I have already derived more than subscription price from reading sample copy.

Hoping that the JOURNAL may not fall below its present standing, will close by wishing you much success in your journalistic effort.

Very truly, yours,

W. L. McLEOD.

CINCINNATI, O., June 5th, 1893.

Dr. H. H. Johnson, Editor Southern Dental Journal and Luminary, Macon, Ga.:

DEAR DOCTOR—The May number of the JOURNAL AND LUMINARY came to us in a very different shape than it has been coming, and, to say the least, you have done yourself great credit in the way the JOURNAL has been gotten up and the manner in which the advertisements appear. We are well pleased with ours.

Respectfully,

AROPHENE MANUFACTURING Co.

CHICAGO, July 7th, 1893.

For the accommodation of the different Dental Associations which are to meet in Chicago before the convening of the World's Columbian Dental Congress, I have secured the Kindergarten College Hall, 10 Van Buren street, which can be used for all meetings desiring rooms.

For any further information, address,

J. N. CROUSE, Chairman.

THE VIRGINIA STATE DENTAL SOCIETY.—Twenty-fourth Annual Session, Charlottsville, August 8th, 1893.

E. P. BEADLES, Danville, President.

J. HALL MOORE, Corresponding Secretary, Richmond.



Necrology.

DR. AMBROSE LAWRENCE.

Dr. Ambrose Lawrence, of Boston, died April 23th, 1893. Dr. Lawrance was the originator of the well-known Lawrence's amalgam. Its introduction in 1851, at a time when amalgams were regarded with no favor, had a tendency to place him in a peculiar position in relation to the active workers of his day; but the dental profession in time changed its opinion entirely in regard to this material, and probably in a great measure lost some of the feeling originally felt towards those who manufactured and persistently advocated its use.

Dr. Lawrence had his personal peculiarities, but was pleasant socially and professionally, and in former years active in dental associations. He for a long period apparently kept apart from active organizations, and has only been known to the present generation of dentists as the manufacturer of the material bearing his name.

He had reached the age of seventy-seven years at the time of his death, and had continued almost to the period of his sudden transition in active practice.

RESOLUTIONS

ADOPTED BY THE CHICAGO DENTAL SOCIETY ON THE DEATH OF DR. W. W. ALLPORT.

WHEREAS, In the death of Dr. W. W. Allport a leader in our profession has fallen, and as a mark of our appreciation of his services and skill, be it

Resolved, That in his death the dental profession has lost a member whose extraordinary skill as an operator placed him among the foremost dentists of the world. His work in promoting the highest interests of the profession will ever be conspicuous, and the prosperity enjoyed by younger members is due in a great measure to his acheivements.

Resolved, That a copy of this preamble and resolutions be sent in proper form to the family of the deceased, and also to the Dental Journal for publication.

TRUMAN W. BROPHY,

A. W. HARLAN, J. N. CROUSE.

Committee.

DR. WM. FURLOW HOLT died in Chicago from a fearful blow in occipito-cranial region of the head, caused by the explosion of a carbonic acid tank on June 22d, in the Eaton Carbonic Acid Works, where he was temporarily employed.

Dr. Holt was a young man with an exceedingly bright mind, and gave great promise of distinguishing himself in his profession.

He was born in Bibb county, Georgia, where he made his home until he took this fateful trip a few months before.

He received his professional education in the Baltimore College of Dental Surgery, and practiced in Macon, Ga., until a few months before his untimely death.

Dr. Holt was the only son of a widewed mother, Mrs. Laura Holt, whom he leaves heart-broken and inconsolable. He was generally liked by the profession, who deeply sympathize with the lonely mother.

It is with sincere regret that we announce the death of Freddie Mason, eldest son of Dr. W. M. Mason. He was a bright and promising boy of fifteen summers, beloved by all who knew him. At school he always led in all his classes, and while exhibiting great strength of mind and character, he was indulgent, gentle and kind to the weaker, and a general favorite with all. He was stricken down in the bloom of youth by a sudden and violent attack of typhoid fever, and Dr. Mason and family have the sincere sympathy of the profession in their sad bereavement.

THE Dental Tribune thinks an association of dental editors to meet at the time the World's Dental Congress convenes at Chicago, would prove advantageous to the journals and their readers. There could not be a better time to organize such an association, and I see no reason why it would not be beneficial. Let others speak out.

POOR MOTHER-IN-LAW.—A few days since a very nice looking man quietly walked in to my office and pulling a bundle from his pocket, asked if I,would not purchase it. Seeing it was a set of artificial teeth, I begged to be excused, and asked him why he wanted to sell them. He said they belonged to my mother-in-law, and she is dead.

B. H. CATCHING.

Wanted, copies of SOUTHERN DENTAL JOURNAL, for July, 1892. Will pay the subscription rate for them. Address the Editor, Dr. H. H. Johnson, Macon, Ga.

Book Notices.

HISTORY OF THE LIFE OF D. HAYES AGNEW, M. D., LL. D. By J. Howe Adams, M. D. With fourteen full-page portraits and other illustrations. In one large royal octavo volume, 376 pages, extra cloth, beveled edges. \$2.50 net; half morocco, gilt top, \$3.50 net. Sold only by subscription. Philadelphia, The F. A. Davis Co., publishers, 1914 and 1916 Cherry street.

Who that are interested in medical and surgical science would not feel interested in this volume. It has been carefully written and well and nearly gotten up by the publishers, and though the author had considerable trouble in obtaining correct data, as "Dr. Agnew (as he says) lived his life without thought of a biographer," he has succeeded, by the aid of friends, in collecting a complete and correct history of the deeds of this great man's life.

It is a book that should be in every professional library.

NANON. BY GEORGE SAND. With introduction and English Notes, by B. D. Woodward, Ph. D., Tutor in Romance Languages at Columbia College. No. 21 Romans Choisis. 12mo. 431 pages, paper, 60 cents; cloth, 85 cents. New York: William R. Jenkins.

Nanon, one of the last works of Aurora Dupin, better known under the nom de plume of George Sand, was written only four or five years prior to her death, which occurred June 8th, 1876. Her life of studies and interest in history, politics, and literature eminently fitted George Sand for such a work as Nanon, where with consummate art she interweaves with countless details the story of the French Revolution in a simply told novel.

A MANUAL OF VETERINARY PHYSIOLOGY. By Veterinary Captain F. Smith, M. R. C. V. S. Author of "A Manual of Veterinary Hygiene."

8vo., cloth, fully illustrated, \$4.25. New York: William R. Jenkins.

This work is distinctive from any other on the subject known to
the profession, it being exclusively a Veterinary and not a Com-

parative Physiology.

STRANGEWAY'S VETERINARY ANATOMY. Revised and Edited by I. Vaughan, F. L. S., F. R. S. Fourth American Edition, 8vo., cloth, with several hundred illustrations, \$5.00. New York: William R. Jenkins.

The work has been very carefully read and considered. The diction has occasionally been improved, and a few alterations made in the nomenclature where such appeared necessary.



THE

Southern Dental Journal

AND LUMINARY.

Yol. XII.

Macon, Ga., August 1, 1893.

No. 8.

Original.

AN OPEN LETTER TO A YOUNG FRIEND.

My Young Friend:

Your favor of recent date received. You are wanting and asking for information in advance of your needs. You need not be over exercised in mind or timidly anxious about State dental examining boards, until it comes nearer your turn, a couple of years or more, yet. Such boards do exist in almost every State and were designed and created (legally) for a good purpose. You seem to question if you persevere in your efforts and studies and obtain a diploma, whether you will be permitted to practice dentistry in your own State or any other State where examining boards prevail, and base your apprehensions and fears upon facts that have come to your knowledge concerning several young men who graduated last Spring (one with marked distinction) who went before the examining board and failed to pass. Bad luck and pretty hard fate, but such is life and there is much of it.

Do not feel discouraged, but persevere with a good resolution and take the chances. The chances will be as favorable for you as for others, all things being equal. I know it is but natural for your mind to be exercised on the subject (rather a favorable feature) but I must advise that you discard it from your thoughts for the present. Text-books, lectures, work and observation of practical demonstrations in laboratory and at dental chair, are quite sufficient to

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interest and engross your time and thoughts until time brings you in nearer approach to the dreaded examining boards, which after all, when you come to grapple with them may not prove so great a terror as some would have you imagine.

There is a time for all things, and every thing in season, if natures laws and the laws of men work rightly. The season for examining boards with you will not prevail until you have graduated, so there is some time for rest and comfort of mind yet. As above stated, examining boards (dental and medical) were designed and are created for benefit, mutual good to the public and the professions, dental and medical, and if properly and judiciously managed, good and no evil may come of them. But like other creations of men, designed for a good purpose, must be watched and nursed carefully to prevent out-cropping of prejudices and evil doings, detrimental alike to the public and the professions.

The rights secured by legislative enactments may be abused to an extent that will render such organizations hurtful and objectionable. Close vigilance and faithful conservative management may preserve them intact and make them useful and a blessing to communities and the professions, but there must be vigilance and thorough subjugation of prejudices. Whatever is law must be upheld and respected until it becomes corrupted and bearable, no longer. All evils can be corrected. The powers that make can unmake.

You put to me the pointed question, "Do you advocate the existence of State Dental Examining Boards?" I will, in reply, answer as pointedly as you question, I do not. I contend, and always have, that when a faculty of an accredited dental college has proclaimed a man worthy and competent to commence the practice of dentistry and has honored him with a diploma with their signatures affixed, that is and should be considered sufficient; and the laws of every State should protect the graduate in his right to practice wherever he may prefer and decide to locate.

If each State could create a board of examiners superior in attainments to faculties in dental colleges, then the examination of graduates would not appear so farcical as it now does, and the standard of dentistry might be elevated through the agency and equitable management of such boards. Knowing as we do how examining boards are generally created and manipulated, the material of which some are sometimes composed, and the injustice that is often meted out to candidates, through ignorance, prejudice and selfishness, I am free to say I am opposed to the continuation of such boards, be-

lieving something better for the profession and the public can be substituted.

The frequent incapacity of members of examining boards is one very objectionable feature, and is censurable. It is questionable if half the members of a majority of dental examining boards could, if questioned, name one-fourth the muscles, nerves or blood vessels of the mouth or face, or tell what arteries supply the inferior or superior dentures, or which is longest, the abdominal or alimentary canal.

When I realize that such ignorance is countenauced and tolerated, and know, as I do, that the most ignorant members of the board of examiners often wield most and sometimes a controlling influence, and realize also that young graduates of high attainments suffer through such ignorance, and frequently through prejudice worse than the ignorance, I feel justified in proclaiming against examining boards as they exist and the basis upon which they are conduct-However, they exist and must be tolerated and respected. They were designed for mutual benefit to the profession and the public, and some good has been accomplished in some sections through such agencies. Like other agencies or organizations created for public good, they are liable to become corrupted and prostituted to base purposes, but, as a whole, so far, they have proven beneficial, and will be upheld and continue to exist as long as good results can be claimed and fair dealing and justice is rightly dispensed--no longer.

In a free country like ours grievous wrongs can soon be righted. Presumptuous abuses will always be publicly condemned.

Be not intimidated and falter not, but push ahead with faith in your ability to accomplish what others have. Respect reverently examining boards for you will have to confront them, and let it be your aim and purpose that they shall be satisfied when they have finished with you and it shall be their pleasure to extend to you the fraternal hand of fellowship, and offer congratulations with best wishes for your success as a young member of the dental profession.

Though opposed (as above stated) to examining boards as created and existing at present, I would not oppose, but would sanction and advocate the appointment of a board of censors by the governor of each State, men of acknowledged ability and in every way worthy and suited for the position, whose duty it shall be to investigate and consider charges prefered against a member of the profession, (practicing in the State) for unprofessional acts or immoral conduct, and mete out to all such the punishment due, should charges

be sustained, even to the extent of prohibiting practicing in the State, if necessary for the credit and honor of the profession. The accused always to be permitted the privilege to confront his accusers and defend himself in the presence of a majority of the board of censors. That would be democratic and just and would secure to the profession in each State all that could be desired for the protection of the status and aignity of the profession, and no one would be liable to suffer through selfishness, ignorance or prejudice.

I deem it presumptuous and contrary to right for State dental or medical societies to appoint or elect of their members a board of examiners to sit in judgment as to the capacity and attainments of graduates of colleges, and say whether they are competent to commence practice, where a faculty of professors (competent and above reproach or suspicion) whose life-business it is to instruct and prepare young men for practice, and who have faithfully imparted instruction to them in accord with the most approved principles of modern instruction, watched them and measured them (deportment and capacity) daily for several years, and passed favorable endorsement of their attainments and so proclaimed to the public by signing and tendering a diploma.

Let the diploma be the passport and guarantee of capacity to commence practice, and security against interference of examining boards. After acts of unprofessional conduct, immoral and demoralizing practices, to be dealt with by the board of censors, according to charges prefered. This would be lifting to a higher plane and more in accord with equity in its strictest sense, and that is what we should desire, strive for and openly proclaim in the interest of the profession and the public. If it be your good fortune to graduate and secure the favorable endorsement of your State Dental Examing Board, then without delay connect yourself with your State Dental Society and shape your course accordingly, attend every meeting if possible and prove yourself a live, progressive, working member (always conservative) willingly receiving from others, and dispense liberally as you possess, in return, by so doing mutual benefit will be realized.

Should you ever be honored with membership on an examining board do not lose sight of past indulged apprehensions and the sleepless hours experienced in consequence of the dreaded organization, and when sitting in judgment as to capacity of others, make a self case of the situation, be considerate, just and humane, and always careful as to how you cast black-balls.

Yours,

OLD PRACTITIONER.



PRESIDENT HARRIS' ADDRESS BEFORE THE NORTH CAROLINA STATE DENTAL SOCIETY.

We have been permitted to make the following extracts from the admirable Address of President F. S. Harris before the North Carolina State Dental Society:

Gentlemen and Fellow Members of the

North Carolina State Dental Society:

It is with feelings of genuine pleasure that I greet you, here in the City of Oaks, where we have been entertained at six annual meetings since our organization as a Society.

We are to congratulate ourselves on falling among such a people, conservative yet progressive and most hospitable to friends and strangers, making one anxious to come again to this Capital City and this Capital building where more laws are made and fewer broken—probably—than in any other Capital of our land.

Time has passed by when, in the labyrinthine depths of the laboratory, the dentist bent over his crucible, invoking mystic aid for his own self and jealously, guarding against letting out the secret to a fellow crafts-man that humanity might be the gainer through the unlocking of nature's secrets.

The association idea invoked a brighter day for dentistry, and now who is so self-conceited as to think for a moment that he is not largely a gainer by meeting with fellows and interchanging views and methods with which each is endeavoring to make himself most proficient in his chosen vocation? It is as the proverb, "iron sharpeneth iron," and my idea here may interlock with your idea there, an intermarriage of ideas, as it were, and with no cause to regret the union. What may free and liberal association not do to break down the walls of selfishness and broaden ones views? And he must be very inattentive or dull or inappreciative who attends one of our meetings and does not take away something, some idea that he can make available in the better practice of his profession. And what a boon it has been to the public, who are beginning to be able to discriminate between the gim-crack dental peddler—the peripatetic china artist, and the true man, mindful of the claims of humanity upon him and whom the civil code, the code of dental and professional ethics or the higher code proclaimed from the mount—the golden rule so applicable to all questions moral and social; the man, I say, whom none of these things can touch because as a gentleman he intuitively obeys their mandates. Aside from the real and practical knowledge that is gained through association, it confers a certain prestige that is by no means to be despised, though no true member will trade on it, as we have seen done by the association hanger-on, the dead beat who, plying his vocation at some out-of-the-way cross-roads district, lets it get abroad that he has gone down to the Association a few days and then returns loaded with the inevitable hand-bill setting forth that having been down to the meeting of the Society, replenished his stock, taken part in its sessions, etc. etc., he is better prepared than ever to excel all others in his line; inviting all to see his method of filling teeth by an entirely new process, while he can give the most teeth and the prettiest for the least money of any dentist in the State. Many of you are doubtless acquainted with the gentleman, though I may not have given him a very graceful introduction. And you have been annoyed by his monumental cheek and gall whereby he worms himself in and out monopolizing best position for observing clinics and handling the exhibits with a freedom, a nonchalance, peculiarly his own.

The Lord knows we do not envy him the knowledge he may pick up but the way he goes about it and the use he makes of it render him very contemptible in the eyes of a true man.

I regret to say there are some really worthy men and very creditable practitioners, having the confidence of a good clientele, who do not lend us their presence and their aid. In most cases it has been because they have strangely not investigated the matter or are not naturally socially inclined and so let it go by. * * * * * Some have felt that her restrictions were galling to their liberal spirits and are out of the fold, but in the main those who do credit to the profession and are most loyal to the public as well, have been careful to maintain their places on the rolls.

* * * * * *

I believe there ought to be established a clinic committee whose duty it shall be to arrange for demonstrations of methods and materials in their application to our needs as dental practitioners; the committee to be appointed annually and while acting as clinicians themselves they may appoint others according as they may ascertain that they are adapted peculiarly to any branch of demonstration.

Having the whole year to operate in, this committee would be able to report on experiments in the treatment of cases which require the test of time, and they could also test the therapeutic

value of new remedies, reporting on the same. The most accurate records of demonstrations of each year should be preserved, and the committee could take into cognizance and watch cases of implantations, replantations, corrections, etc., which would possess obvious advantage over leaving it to the operator himself to report.

This committee could see to it that clinicians would provide their own instruments, so far as they may be able to bring them—a sufficient number of chairs and the heavier apparatus being provided by arrangement with the dental depots and local dentists. If it should come under the observation of the committee that a dentist had a case of extraordinary interest and the patient could be shown, provision might be made to pay the expense of presenting the patient, but of course great discretion should be used in this, and the committee should be thoroughly satisfied as to the merits of the case. Usually the material for clinics could be secured by the local dentist of the place of next meeting.

Again: While our Society has done much to educate the people so that they can, to some extent, discriminate, yet in some sections of our State the public is at the mercy of the quack, and that, too, not because our laws have been proven so inoperative, for they have not been tried; which indicates great indifference in the matter among our members, or else we are afraid we shall be adjudged envious or afraid of professional rivalry, or that we will give the other fellow a handle to use in his cry of persecution. these things should move us. We owe it to ourselves to protect the profession, and it has been made obligatory on us by resolutions of our Society, in Convention assembled, to report any case of violation of law. For my own part I have protected myself very well, and was laying plans some time since for a violator of the law, when he somehow got an inkling of it and went to a distant State, where they ask no questions, and where he can use his own sweet will as to how and when and where he shall practice.

I think our members should make themselves familiar with our dental legislation, and to this end would recommend the publication of our dental laws in pamphlet form for distribution to all our members.

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The literature of our Society, the proper preservation of its records and the publication of such matter as would be of general interest, should have the most careful consideration of our publication committee. The SOUTHERN DENTAL JOURNAL has been made the official organ of our Society, and has given liberal space to the publication of our proceedings; but our own committee should be responsible for what goes out from our Society and should exercise such discretion that matter of trival worth shall not be offered to our Dental Journals and at the same time not over look the productions of real merit, some of which are of sufficient interest and importance to merit preservation in pamphlet form.

I would respectfully recommend that the Secretary have the Constitution, By-Laws, Code of Ethics and Rules of Order written in one book, beginning on left page and leaving right page blank to enter amendments, etc., with a reference to date, and page of the minutes where the action of the Society is recorded. A copy of the dental laws should also be inscribed in this book, with like blanks for amendments.

I would further recommend a revision of the old list of members in the record book of our Society, completing the list to date and leaving blanks for record of members; something after the manner of a Church register.

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Gentlemen of the Society, it is not that our Society has not done much good but we are getting old enough to do still more. And while we have been often times complimented by visiting brethren on the harmony of our sessions and the courteous bearing of our members, and we have made excellent progress in some lines, and some of our members are most efficient and conscientious in the performance of their duties, yet we do need a more thorough appreciation of individual responsibility, whether occupying positions of important trust or simply as the most private member. "Ichdien" should be our motto, and it is hoped that we shall have this year through the enlarged committees much work done and much progress shown, and that we may all feel encouraged to strive to make our annual meetings as effective as we can real expositions of the progress of thought and training in our high and noble profession

A CURIOUS OLD CUSTOM IN NORWAY.—In some parts of Norway, in houses of the rich and the poor peasants, wooden chairs can be found, in which rows of teeth have been sunk. It has been the custom of past generations to sink into those seats the temporary teeth, and though now abandoned, it is said that the strange custom dates back to the times of fetichism.



A BRUNSWICK STEW.*

BY DR. C. A. ROMINGER, REIDSVILLE, N. C.

ANTRAL TROUBLES.

Diseases of the antrum, resulting from dental troubles, are by no means infrequent, and are often of a very grave character.

Mr. M., who had been treated by a physician for six months for catarrh, was suffering with engorgement of the antrum from an abscessed tooth. The floor of the orbit was so much elevated as to force the ball of the eye almost wholly out of the socket. On trial, the ball protruded an eighth of an inch beyond the ridge of the nose. The first superior molar on the left was extracted, as the offending cause, and an entrance made through the socket into the antrum, and then syringed out from the socket through the nose. It was so offensive that all windows and doors had to be opened to get rid of the awful stench.

Such cavities should first be thoroughly cleansed with peroxid of hydrogen, for several days, till the generation of pus ceases, and then followed by a 50 per cent. solution of campho-phenique in alcohol. This is antiseptic and, at the same time, is mild enough to stimulate the parts to healthy action.

Mrs. S. had suffered for sixteen years with chronic abscess of the antrum resulting from an offending molor. The tooth was removed shortly after the trouble began, but no entrance being made into the antrum and no drainage afforded, the disease smouldered on like the pent up fires of a volcano with occasional eruptions and emissions from the nose.

She was a great sufferer from what she and the physicians called neuralgia and catarrh. The bicuspids and first molar on the left were gone years before I saw the case. On close examination I found a little fold, or fissure, in the gums on the alveolar ridge near the position of the second bicuspid. The gums seemed to be healthy, but on forcing an explorer through the fissure, I found the bone to be in an unhealthy condition, not what you would call necrosed bone proper, but carious so that the probe would enter it and when pulled out it felt as if some clammy substance was cleaving to it.

The patient had suffered so long and so greatly that her mind was greatly impaired, and her constitution very much broken down. So without expressing a diagnosis at all, I cocainized the parts by

^{*} Read before the North Carolina State Dental Society, May, 1893.



injections, and bared the bone for an inch in length and half an inch in width along the alveolar ridge, and then with a large and sharp round bur I cut away all diseased bone. Then with a long implanting drill I made a free entrance into the antrum. Thus having free access into the antrum I washed out the cavity well discharging the medicine through the nose. This treatment was kept up for more than a week at intervals of two days each, and then the patient was dismissed with instructions for self treatment. She soon recovered the proper use of her mind and was restored to normal health.

POLYPUS.

Mrs. W. had a small growth attached to the superior maxilla just behind the left cuspid, which would bleed profusely on the slightest provocation. It gave no special pain, but had been a source of some anxiety. No diagnosis was given the patient; but the parts were well cocainized and the gum tissue cut away with a scalpel, and then the surface of the bone freely cut away with a bur at the point of attachment. The parts were well cleansed and antiseptisized, and the patient dismissed. All this was done at one sitting without ever alarming the patient with the fact that she had polypus and that it must be cut out. She was entirely cured.

Mr. S. had a large gelatinoid polypus in each nostril, so as to completely close the air passages in damp weather. The attachment was so far up that I had to tear it away with an alligator forceps—some hemorrhage and considerable pain, so that the patient was dismissed for another time to extract the other. Not completed yet.

TUMOR.

Mrs. M. had a tumor on the side of the nose just opposite the eye, about the size of a cherry seed. It had been coming for about seven weeks. The patient was very frail, and she and her husband were very nervous over it, fearing it was a cancer. With a hypodermic syringe I injected cocaine, and with little pain cut out a fatty tumor, to the great satisfaction and relief of the patient and her husband. I scraped out the cavity with a spoon shaped instrument, and then filled it with a piece of cotton saturated with campho-phenique, full strength. In about ten minutes I took that out, laid the edges of the wound together and covered with court-plaster. Dismissed.

CATARRH.

Thousands of persons suffer with catarrh, who might be greatly relieved, if not permanently cured, by the intelligent dentist.

Serious complications and unyielding sore throats often come from mouth-breathing; and mouth-breathing is most frequently the result of nasal stoppage. Frequently one nostril is nearly closed by spurs or prominences on the septurn of the nose, which can be removed by the skillful dentist; and the breathing passages nearly doubled by their removal, to the great relief and permanent benefit of the sufferer. With a nasal speculum and a reflecting hand-mirror, the nasal passages can be explored with great satisfaction. Then by cocainizing the parts well, and with a good trephine on the dental engine the spurs can be almost painlessly removed. The wounded parts should be cleansed with peroxid of hydrogen, and the patient dismissed with the hope of a permanent cure. I have treated six cases recently of this character with the very best of results. Italso greatly improves the hearing when it is impaired from catarrh of the eustachian tube.

NEURALGIA.

I do not know of a more frequently used scape-goat than the one of the above name. I venture the assertion that neuralgia is not a disease per se. It is the manifestation of disease—the howling of the dog when the tail is mashed—the crying of the baby when the belly aches.

How foolish it would be to poultice the dog's mouth to cure the mashed tail, or to blister the baby's tongue to cure the belly ache! And yet many times when the immediate cause of a neuralgia is not at once found, by physician or dentist, the patient is dismissed with the consoling declaration that she has neuralgia, and thus she is abandoned to the agonies of purgatory without a ray of hope from those so-called lords of science. The most frequent cause of facial neuralgia is an exposed nerve or an alveolar abscess.

But severe facial neuralgias do frequently arise from other causes. One of the severest cases of facial neuralgia that ever came under my care was caused by albuminuria. I exhausted every resource I could command, and then called in the assistance of one of the most skillful physicians in the State, and we counselled together and searched diligently through the whole economy, at the same time trying every anodyne that we could summon for temporary relief, without the least particle of success. Finally we tested the urine and found it just freighted with albumin. A few days of treatment in cleansing the kidneys and stimulating them to healthy action, completely cured the neuralgia.

A lady came from Virginia to our town to be treated for sore throat and neuralgia in one side of the face; and while under treat-

ment she came to my office for some work on her teeth. On examining them I found a lower molar on that side dead and having a large amalgam filling in it. It was not abscessed but only slightly tender to percussion. I said to her, "Well, now, I'll cure your sore throat;" and I did. I put that tooth in good healthy condition, and the sore throat and neuralgia disappeared and never returned.

It is only the ignorant dentist or physician who treats neuralgia as a disease per se. Look for the cause and remove it, and the manifestation will at once disappear.

You may often need the assistance of an intelligent physician in such cases, especially if your patient is a female in her flowers, or during pregnancy. Ever keep a lookout for reflex pain, but look until you find the cause, and conscience as well as the gratitude of humanity will abundantly reward you for your labor.

MAY 23d, 1893.

ANATOMY AND PHYSIOLOGY.*

BY DR. J. S. SPURGEON.

The most wonderful of God's creations, is Man.

The most sublime subject that has ever presented itself to man is the Embryological, Histological, Anatomical and Physiological development of the organs of the human body.

The investigations and speculations of the embryologist and histologist have been varied and gratifying. Deep thinkers have speculated and investigated; but to-day, when they are asked to point to the vital or living principle which we call life, they tell you this is one great mystery that still remains unrevealed.

Not so with the anatomist and physiologist. We have only to refer to Lerdy's, Quain's, Allen's and Gray's Human Anatomy and we see that their labors have been crowned with success. They have succeeded in tracing and naming the most minute nerve, the most feeble circulation, and the most wonderful construction of the human brain. To the labors of these men the Physiologist owes his ability to name and describe the function of each organ of the human body.

And to these two Scientists, the Surgeon, the Oculist, the Nerve Specialist, the Physician and the Dentist, are indebted for the

^{*} Read before the North Carolina State Dental Society, May 23d, 1893.



foundation of all their knowledge, which make their labors a success and a blessing to humanity.

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But to confine myself more strictly to the anatomy and physiology of the dentist, I will ask the question, what makes the teeth decay? To this question you go through a long list of surmises, probabilities and possibilities.

Why should this question not be answered? Why should it not be understood? And then why should we not be able to prevent decay? And then when all this is accomplished, why should we not be able to engraft new dentine where decay occured before we knew how to prevent it and produce a beautiful tooth, instead of making a great display of gold; and for those who have lost one or more teeth, why should we not plant the germ and grow as beautiful set of pearly white teeth as imagination can picture? The botanist can unite matter in the vegetable kingdom in such a manner as to produce the most wonderful results; in fact such results as were never dreamed of a few centuries ago. He produces flowers in hundreds of varieties; he produces them to bloom at every season of the year; he colors them at his will.

The animal kingdom is as vast as the vegetable; the soil is as rich, and why should we not make the dermoid system to bloom at our hands.

The fruit grower, also, has produced results most wonderful to behold. He colors the fruit at his will; he flavors it and makes it more delightful to the palate than imagination can picture. He matures it at all seasons of the year; so why should we not stop the cultivation of crab apples, stop repairing rotten fences and produce results from the dermoid system such as has never been dreamed of?

The surgeon engrafts new skin into large wounds and ulcers and produces a nice new covering for the diseased parts. He also engrafts new perosteum and produces a new covering for the denuded bone. So as we see this principle applied to other organs of the body; why should it not be applied to the teeth as well? Let us not be content to follow in the paths that others have trod, but let us continue our labors. This world is made of organic and inorganic matter, and when we know it properly and understand how to use it, we may be able to grow a beautiful set of pearly white teeth in the toothless head; and cover the bald scalp with a luxurient growth of hair. Let us grow a smoother velvet skin on the furrowed and care-worn brow; when this is accomplished it will impart a differ-

ent expression to the haggard face and paint the sallow cheek with a new supply of blood from the pierial fount. When we shall have accomplished all this, a vast choir of bald-headed and toothless people will be assembled to sing our praises forever, through endless ages of time, and nations will bless our memories because we have been the *greatest* benefactors of human kind.

DENTAL EDUCATION.*

BY DR. W. PAUL MOORE.

Mr. President and Fellow Members:

It affords me great pleasure to be with you once more. Sickness prevented my appearance at the last annual meeting, but I now appear before you as one of the representatives of my committee on Dental Education. Having never written anything of the kind before, charge it all to our worthy Secretary who caused me to inflict this torture upon you. In my trips to the several little towns that are in my circuit, I have noticed the children of the public and private schools studying physiology and how much stress is laid upon circulation, respiration, and digestion, the muscles and their functions, but that very little attention, if any, is paid to what concerns our branch of the subject, i. e.; the mouth and teeth.

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As many of my city brothers of the Society can testify, there is a vast deal of difference between city and country practice, especially regarding the care of the teeth and the importance thereof. One thing I find, having been a city dentist, is that country people are cash, and in the city it is charge it to papa, and papa takes his time and you are somewhat lucky if that time ever comes, and in the mean time you have to go down into your pocket and haul out a great big rent and whistle for the wind to blow papa your way.

The parents of our city patients take pride in their own teeth and are generally educated enough to know the importance and necessity of over-looking and superintending the teeth of their progeny.

As one grows old he appreciates the lack of attention paid to his teeth, and strives to save pain and annoyance to his children. But to return to the remarks on physiology.

^{*} Read before the North Carolina State Dental Society, May, 1893.



Our school teachers should devote more time to the hygiene of the mouth and teeth; teach the children the importance of cleansing their mouths and teeth, use of soap, powder and tooth-brush. The parents should be informed of that awful destroyer of the enamel, green tarter, and not let the children's teeth go all to pieces before bringing them to the dentist, and expect him to work miracles trying to restore them to their pristine excellence. Good teeth and healthy gums, as a rule, mean good health.

In my journeys from place to place I meet with so many people who assert that they have not a single decayed tooth in their mouths, and no dentist has ever worked on them; that they may have a few black spots on their teeth, but as they never hurt them, they amounted to nothing. They let those spots run on and on; we know the consequences—odontalgia, and as no dentist is near, our medical brother with his grandfather's instruments of torture makes an attempt at extraction. The country dentist also meets with people who talk to him about their teeth being "quicky," and that when the dentist doctor works on them, he touches "the quick."

Before I moved to the great North State, I had never heard the term "quicky," the term was entirely new to me, and such a time I have had explaining why I did "this and that." No professor before his class could have talked or lectured more than I have done to some of my questioners, especially that the sixth year molar is a permanent tooth and not a "shedder" as some of my patients insist.

The importance of physiology relating to the mouth and the teeth can be greatly aided in our profession, and with great financial gain to each of us, by getting the preceptors of our schools to give more attention to this subject. Dr. White wrote a small treatise on the mouth and teeth, which I read before I studied dentistry. Another pamphlet, and one which will greatly aid and comfort a mother, regarding unnecessary pain caused by neglecting the teeth of her children, was written by Mrs. Dr. Walker, of New Orleans. who was for a long time connected with our Southern Society. is entitled. "Letters from a Mother." Would it not be a good plan to procure a number of these books and distribute them among our poorer schools, and by their use, impress upon the parents and children the importance of their tenets and teachings. We would ourselves be benefited by their having been perused, as many people would have an insight gained therefrom, as to the importance of good teeth and good health.

Another point on this subject. When I was a child I was compelled to go to my dentist every two months, and have my teeth

examined. That taught me this lesson, and one which I try to impress upon my patrons. Go to your dentist and have your teeth examined, it costs you nothing, and if you believe me to be honest, you must have confidence in me and my work. I shall not bore holes in your teeth, as you call it, and fill them for the sake of a dollar or two, for my policy is always, honesty is the best and pays always in the end. I am here to stay; if my work does not stand, and pleases you not, I am sorry, call on me again, it will cost you nothing; i. e. provided I am talking to a single man; on the other hand the married man is different. Why? No one can quarantee fillings for young married women on account of green sickness. Many of my dental brothers seem to ignore that fact entirely. I have talked to several, and many did not know what it was, nor had ever heard of it. Many parties from ignorance on this subject. have had their mouths ruined through lack of proper instruction. It should be the duty of the family physician, especially to inform his patient on this subject, but I suppose he thinks that as we are a branch of his profession, we are all of the same mind and "are out," for the dollar, so that as long as he attends to one end, it is our duty to attend to one and profit by the other. How many of our medical brethren study or read up on teeth? They can extract incisors, laterals, bicuspids, etc., but when a good old "dens sapientiae," or a broken off twelve year molar come along, what does he say! "My friend, you had better go and see Dr. so and so;" or he attempts the job with his (you know what kind of forceps our medical brethren in the country have), "pullikins," and from seven to nine cases out of ten, the tooth is snapped off to the gum, or below it; our friend pays the doctor his fee which is generally half what I charge. He then comes to me and I have the hardest work to do and cause him much more pain in getting out the "fangs," as the English say. The tooth costs him one and a half, where it would have cost him one, saved him annoyance and pain by going straight to the dentist, and all for the prospect of saving a half dollar.

The city dentist has far less to contend with than the traveler. Our city brother has his regular stream of patients, and if he treats them with justice they continue to go to him, and are his friends from one generation to another. He has not so much talking to do, explaining how he does this and that, and "Doctor, what are you going to do now?" His patients have been there, as the song says, before, "Many a time, many a time." Moreover, his time is too precious; wasted words are money to him.

Turn now to the traveler striking a new place. Two or three-weeks before he sends out his cards announcing his time of sojourn. He arrives, opens his office, makes himself generally agreeable around the hotel or wherever he stops, goes down to his office next morning, displays his tools, etc.; people come and look in at him, or stand on the other side of the street and ask each other who he is; and I find it a general rule among the illiterate class that the answer always is "The dentist doctor on teeth."

To cite an instance of my early practice in this State before moving here permanently, I purchased a Morrison chair from a friend and sent it to Jackson. No one in that section, that is, among the general run of folks, had ever seen a regular dental chair, every one being accustomed in the country, to the head-rest screwed on to the chair, or the rocking chair pillow for a head-rest, and blocks of wood or a dry-goods box for an elevator. Soon after I had fixed up my office, court-day, a warm one at that, my office door opened. two men came in, I was busy on a mending case. I greeted them cordially and met with this: "Mister, how much do you charge for a hair-cut and a shave." I was non-plussed, the idea of my being taken for a barber. They soon departed, much to my joy, when another pair drove up, and I was greeted in the same manner, but by that time I was not only non-plussed but mad; and replied. "Two dollars." "Great God, Mister, aint you mighty high?" I then explained the workings of the chair, my engine, etc. I have told this joke on myself and those people are more ashamed of themselves for their ignorance than I was for being taken for a barber, and are being constantly teased by their friends regarding the affair, but to my gratification, are among my best paying patients.

WHILST a man of average physique may work for many years in the practice of some professions, and do the highest and best work in his calling, without suffering from the effects thereof, I think I am right in saying that when a man is fully occupied in such work as the preservation of the natural teeth in the mouth entails, there are few who do not feel and show the effects of the strain upon their nervous system. And this condition of things, if not recognized and promptly remedied, will have a permanently injurious effect on the lives of such operators.—W. B. Neale.

Go to the World's Dental Congress.

GEORGIA STATE DENTAL ASSOCIATION.

TWENTY-FIFTH ANNUAL SESSION.

(CONTINUED FROM JULY NUMBER.)

FIRST DAY-NIGHT SESSION.

Vice-President N. A. Williams in the Chair.

PROSTHETIC DENTISTRY.

Dr. W. G. Browne made a verbal report as follows, describing a method of making a partial lower gold plate without swagging: He took a piece of No. 30 pure gold and burnished it to the plaster model. This could be done accurately as the gold is very soft. After this, a second piece, not quite so broad, was burnished over this with bits of platinum between to hold them apart. The two were then soldered together, making the plate very strong and rigid, and the teeth fastened on with rubber. He had also made an upper removable bridge piece in the same way held in position by telescoping gold crowns fitted to the eye teeth.

Subject passed.

Subject of crown and bridge work called.

- Dr. H. H. Johnson, the only member present said he had nothing new to offer.
- Dr. T. P. Hiuman described the process of making aluminum crowns with the Morrison stamping outfit. With this machine an aluminum crown could be made in a few minutes, the cusps stiffened with amalgam, (as it cannot be soldered) and you get a cheap crown that could be used where patients cannot pay for a more costly one. Dr. Hinman also spoke of the use of seamless ready made gold crowns and advocated their use claiming to get as good fit with them as by first making and fitting a band and making the crown step by step and with much less trouble.
- Dr. C. V. Rosser did not believe that a bought or stamped crown could be as accurately adjusted in the majority of cases, as where the crown was made specially for the tooth that had to wear it.
- Dr. H. H. Johnson was of the opinion that he could get a better adaptation where he made the crown himself. Teeth are of an infinite variety of shapes making it necessary where a very accurate adaptation is required, to make a crown specially shaped to each tooth separately. He had also had trouble with the solder when filling in the cusps of ready made crowns. The solder would climb

up the inside of the crown and spoil the fit and articulation. Dr. Hinman thought this was the fault of the borax; use fresh borax and paint it just where you want solder to flow.

Dr. B. H. Catching said jewelers use Spanish whiting to prevent solder flowing where it is not wanted.

Dr. W. H. Morgan said solder would not flow over a surface where whiting had been used.

Dr. Wm. Crenshaw spoke of the J. J. R. Patrick stamping machine for making crowns and advocated the use of ready made crowns. It was so much more easily done that way saving so much time and time was certainly worth something. He said it was his experience that crowns with porcelain faces were not serviceable unless you shoe the tips to protect them from being crushed off while masticating. Dr. Morgan said a great many crowns were failures because they did not extend low enough to be protected by the gum. They were made too short; all of the tooth that is not invested with periosteum should be covered with the gold.

Dr. Johnson cited a case of the failure of an otherwise beautiful piece of bridge work because the molar crowns were made too short on the langual surface, allowing a disintegration of the cement.

Dr. Browne: In making a Richmond crown, when the porcelain is put in position there is often a space between it and the band. If pellets of foil are packed into this space the solder will flow in making a tight joint.

Dr. Johnson said he backed the porcelain face with thin pure gold extending over the entire inner surface of the porcelain. This caused the solder to flow in and close all the joints.

Dr. Catching wished an expression of opinion from Dr. Johnson in a case where a young lady wishes a bridge to supply a lost second molar out of a set of otherwise perfect teeth. Would he bridge such a case and how should it be done?

Dr. Johnson said he would not advise a bridge in such a case.

Dr. Catching: For bicuspid crowns I am satisfied with the Logan crowns with a gold band, it makes a beautiful, serviceable piece of work.

Dr. J. S. Thompson: I am delighted with a crown which I make with a Logan Crown and a plate ferrule, covered with gum body and baked in a Dowill furnace. You can get all shades of body, and it makes a beautiful piece of work, looking as if growing out of the gum.

Dr. Aug. Burghard, of Columbus, Ga., being recommended by the Executive Committee, was elected to membership.

Dr. D. Atkinson thought that sufficient stress had not been laid upon the importance of heavy cusp in crown work; the discussion had been altogether upon the adaptation of the band. The weak point in a crown is its liability to wear through. This can be overcome only by making, stamping and filling in the cusp before soldering to the band.

On motion, the subject was passed and the Society adjourned.

SECOND DAY-MORNING SESSION.

WEDNESDAY, April 10th, 1893.

On the recommendation of the Executive Committee Drs. R. A. McArthur, Gordon; W. O. Breedlove, West Point; and W. A. Summerlin, Dublin, were elected to membership.

The Executive Committee recommended the suspension of Dr. E. B. Marshall for one year for violation of the Code of Ethics, which recommendation was adopted.

INCIDENTS OF OFFICE PRACTICE.

Dr. S. B. Cook, Chattanooga, Tenn., spoke of aluminum cast plates. Had not been unusually successful with them. Swaged plates were more satisfactory to make and pleasant to wear. He attaches the teeth with rubber, engraving or cutting grooves in the metal to hold the rubber. Uses metal about twenty-two guage to stamp the plates from.

Dr. Rosser reported having cast a number of aluminum plates, but with variable results. Prefers the swaged plate, but does not approve of grooves to hold the rubber.

Dr. Cook explained that he turns a rim on the outer edge of the plate that holds the rubber securely. Prefers black rubber.

Prof. Morgan said the tissues of the mouth would tolerate black rubber where other colors cannot be worn. The trouble comes from the sulphur in the rubber.

On motion of Dr. B. H. Catching, telegrams were sent to Dr. E. M. Allen, of Marietta, and Dr. W. H. Burr, of Madison, urging their presence at this meeting, they being the only survivors of the original members.

Dr. S. B. Cook, President of the Tennessee Dental Society, tendered a most cordial invitation to the members of the Georgia Society to meet with them at Lookout Mountain, July 4th.

The courtesy was acknowledged and ordered placed on record. On motion, adjourned.

SECOND DAY-EVENING SESSION.

Called to order at 3 P. M., Vice-President Williams in the chair. Several Committees were called with no response, Committee on Education being called Dr. D. Atkinson read the following paper:

At the next session of the National Board of Dental Examiners a resolution will be discussed, the import of which is that that Board will recommend to the several State Boards of Dental Examiners throughout the United States that when a person shall have obtained a license from a State Board he should then be admitted to practice in any State without further examination. This is a question which addresses itself directly to those concerned in the advancement of dental education, in that the right to license lies in the State Boards individually, over which the National Board has or can have no jurisdiction, and by which the educational standard must be maintained. Yet unity of action is necessary to the achievement of the ends sought. That unity must therefore be preserved by the co-operation of the State Boards with the National Board, and the National Board must adopt such measures as will be practical and acceptable to all State Boards. It is urged by the promoters of the proposed resolution that it will give the State license a fixed and recognizable character, and that wherever a person can show one in the United States he will be considered competent to The question is an open one and deserves consideration: First, because of the high placing of the resolution; and, second, because the question of interstate practice has not vet met a solu-It must be admitted that a person who is really competent to practice dentistry would be as much so if his residence was in one section as in another, and it must ultimately follow that there will be such an interstate adjustment as will permit a properly educated dentist to change his residence from one state to another without an examination. But the resolution referred to does not meet the requirements, in my opinion. Our State Board, for instance, is charged with prescribing a course of study for those who do not attend college, and to admit them to practice when they can stand a satisfactory examination. That is a matter of law, and the legal right of the applicant. And while he may succeed in passing his examination, it is not possible that he has had all the advantages of learning that he would have had at a well equipped dental college, nor would it be proper for him to expect that other States would accept him as an educated and competent dentist. It is not in keeping with the spirit and genius of the times. A dental law, like all others, is not retro-active; it cannot prevent those from prac ticing who were in actual practice at the time of its passage, however incompetent they may be. In many of the States the newly created Boards were required to license all who were practicing at the time of the passage of the act without regard to fitness. fore, it would seem that States' licenses, in their general significance, would be void of those elements which would go to give them a professional character. Would it be right to permit the holder of a license thus obtained to go from one State to another and be recognized as an educated dentist just because he has it? And would it be right to give a license thus obtained a character equal or superior to a college diploma, by admitting the holder to practice in another State without an examination? Let him stand his examination if he can, and if he cannot, let him limit the field of his practice to the borders of his own state, where he obtained his license by a vested and not merited right, and where his people know how far to trust him, but let him not pose as a skilled dentist, while his certificate may be a premium upon ignorance, and he insinuates himself into the confidence of innocent people in a strange land, because for sooth he holds a State certificate.

The purpose of State Boards is to determine whether or not a person is legally qualified to practice, and can in no wise offer any substitute for the facilities and opportunities of learning as furnished by the recognized colleges.

I do not propose any substitute for the resolution, nor solution of the problem, but it seems to me that when a person holds the diploma of a recognized college, and besides has passed an examination before a State Board as an additional evidence of qualification, he should be permitted to practice anywhere he may reside.

Dr. G. F. S. Wright said he was prepared to endorse much of the paper read. He understood Dr. Atkinson to say that it was the function of the State Boards to verify or condemn the work of the colleges as vouched for by diplomas granted. But diplomas have been obtained by illegitimate means. Where this is found to be the case the Boards have the right to throw the holders. But if they find that the holder is legitimately entitled to the diploma he holds, as evidenced by his attainments, then they endorse it by their license.

The great difficulty lies in the first registrations under a new State law. Many are legally entitled who practically are totally unfit for the profession. Then again there are many others who have grown old in the practice of dentistry, who have a vast fund of practical knowledge, but who have never been inside the walls of a dental college; who have no diplomas. In the olden days facilities for acquiring knowledge were not great; knowledge was not easy to attain. And yet such men have done much to advance the progress of dentistry. But now, if men are governed by proper impulses they will not seek to enter the dental profession through any irregular channels, but through the halls of a dental college.

Dr. S. B. Barfield called for by Dr. Morgan, as a representative of the Georgia State Board, replied that he was not now a member of the Board, though he had enjoyed that honor for a period of eight years. He agreed with Dr. Atkinson that the possession of a college diploma, backed by a State license, ought to entitle a man to practice anywhere.

Dr. Rosser said that he had his own decided opinions on most subjects, but he was perfectly willing to let each one hold his own. He thought some way ought to be found by which men of recognized abilities should be allowed to practice wherever it suited them to go, with no thought of a State Examining Board to hamper them. Some of the best operators in the world, some men with the finest practice and reputation, have been out of college for years, but, having given their time and attention to matters of practical nature, are not prepared to go before a State Examining Board prepared to face a list of test questions designed for young men fresh from the college halls. He had seen a suggestion of this nature. At the close of the winter term of the college year, have a joint meeting of delegates from the different State Boards have a joint reunion in some central place and examine the college graduates all at once, giving those who pass a certificate signed by one representative from each State Board, which shall be recognized by each State accepting this scheme. At the next meeting of the National Board some means of this kind will be adopted. college diploma and a certificate from a State Examining Board combined ought to be sufficient. Some method ought to be adopted by which one State shall recognize the others.

Dr. Carpenter: A number of years ago, when the first State Boards were organized, there was a much greater necessity for the exercise of authority by the State Boards than exists at the present day. In those days diplomas were sent out by express. Many were honestly sent to upright, good practitioners as a mark of honor and esteem. But soon this was abused; the money question became a factor, and they were boldly offered for sale at a price varying

from five to twenty-five dollars. The National Board of Examiners found that it was necessary to do something in the matter. The State Boards refused to recognize college diplomas, and the National Board said to the colleges: "You must issue no more honorary degrees." A much higher standard of education in the colleges has followed the action of the Examining Boards. There is one feature in the work of the State Boards that is decidedly wrong—that is, requiring the examination of honored and prominent men of the profession. If Dr. Morgan desired to locate in Georgia to-day, he would be met with a protest. You cannot practice within the limits of our territory without a license, and you cannot get a license without an examination. There is something wrong in this, but how it is to be remedied I cannot say, but it is an evil that must be corrected.

Dr. H. R. Jewett: This is a very interesting subject. When I graduated I thought it was a great imposition that I had to go before a State board for another examination. I thought the college diploma should give me all the privileges I desired. I realize now that I was wrong, I did not understand the points involved. I did not know that diplomas had been illegitimately sold. There was a necessity under the circumstances for State boards, but the time will soon come when we can do without them. We have no doubt any longer of the competency of the college faculties. But before the State boards go there is one more thing for them to accomplish and that is to raise the grade for entrance on literary qualifications. They must check off those young men who have more cheek than qualification. In many cases the literary requirement is not high enough.

Dr. W. H. Morgan: We are still in the progressive stage. Everything cannot be accomplished in a year or in a decade. I can remember when there were no colleges. There were very few colleges when I graduated. There was but one regular graduate in the State where I first settled, though there were a number of men holding honorary degrees—bestowed as compliment upon leading men. One object of the schools in doing this was to enlist the interest of prominent men in favor of the regular system of dental education. Many of the best men in early days were opposed to the idea of dental colleges, and it was proposed to enlist their sympathies by bestowing honors upon them. Not many were sold. I know of only two colleges which were guilty of this practice—one in Philadelphia, and one in Wisconsin. The function of a board of dental examiners is to ascertain if a man is practically qualified to

practice the art of dentistry—they have no right to go beyond that field of inquiry. The National Board of dental faculties says the dental schools must require so-and-so. The only way to reach it is through the National Board of college faculties; it is not within the jurisdiction of State Boards. There ought to be an interchange of courtesies, an interchange of State licenses. To deny a man the right to practice in any State who has proven himself duly qualified before the board of another State is taking a narrow view of the subject and looks like petty jealousy. I doubt if you Mr. President, could go at this moment before your State board and pass a technical examination on every branch. If you were fresh from school where you had just taken it all in and had crammed with a view to examination it would be a different matter. I hope and believe the day is coming when the diploma from a well known school will have its proper weight in the minds of examining boards, and that men will not have to stand these uselessly strict technical examinations, but will be allowed to practice on the faith of their diplomas.

What is a State board examination worth? Why, very recently three or four of our Vanderbilt Freshmen went before a neighboring State board and passed a final examination receiving a permanent license to practice dentistry in that State, and yet they had only been in the college five and a half or six months, a mere preliminary course. They said they passed the examination, and they got the license. In one recent board examination the first question was—Give a description of the skin and its functions. No physician could do that intelligently in less than a volume of a hundred pages. One distinguished educator said that it would require a 250 page book to exhaust the subject. They attempted to make the examination severe, but they went entirely outside the province of dentistry.

The time will come when there will be an over abundance of dentists, there will be more than are needed in proportion to the population, but that will cure itself; some will die out, and in a few years more we will have fewer dentists but they will be better.

I don't see how we are to fix a guage of literary attainments for entering a dental school, we must take them as they present themselves, or we might shut out the very men who might eventually prove to be the best dentists. A few years ago a young fellow came before us for admission who was so absolutely lacking in literary attainments that we were in a quandary as to whether to allow him to enter, but we decided to let him try, and at the end of the term

he took the founder's medals for the highest examinations. He was the best qualified man in the entire class. Would you reject a man because he cannot spell? There are no fixed rules for spelling—works are constantly being changed.

General Jackson's daughter-in-law was a most highly educated woman. One day a boy brought a note to the General, who, not having his glasses asked the lady to read it; she said she could not understand what it meant, but it was something about selling him a read kow. He exclaimed—"well, if that don't spell red cow, will you please tell me what it does spell?" And so you might rule out a man because he misspelled his words, but I wouldn't give much for the education of a man who cannot spell any word in the English language in more ways than one! Everything in dentistry depends upon practical points except diagnosis, and that is altogether a matter of judgment, for which no laws can be laid down.

It is not always education that makes the man. A man may have a vast amount of a certain kind of knowledge and yet practically be a great fool, or he may be a very wise man with only a modicum of knowledge.

Dr. B. H. Catching: I have listened with amazement to the words of Dr. Morgan. I have the greatest respect for his abilities and scientific attainments. But with all due respect, I must be allowed to say that that speech was beneath him, and carries us back to the sixteenth century. In this nineteenth century, with our vaunted intellectual advancement, shall we say that the examining board of this commonwealth, which has the vested right of protection against empiricism, has not the right to fix its own standard of attainments? I have heard Dr. Morgan speak on this same line before. Why he so persistently fights the State Boards I cannot say. If it was necessary for the Vanderbilt faculty to make a choice between two gentlemen both equal in mechanical abilities, but one a man of no education, the other an accomplished scholar, I am sure the latter would be their choice.

In the other chairs of his grand University a high degree of mental training is necessary before entrance is possible—young men who have graduated from the best grammar schools are not prepared to enter. Why should he so belittle the chair of dentistry as to decry the necessity of even the rudiments of a common school education? Civilization is spreading; Christianity is progressive, but that speech reads as if a clipping from sixteenth century literature. The position of our profession today is due so the stand taken by the State Boards of Dental Examiners, and the standard

Examiners of the United States. We have no fight against any school but we want to see them all attain to a high degree of eminence. Students who are properly qualified need not fear an examining board. If they are not qualified it will not be our fault. I wish he would stop fighting the State Boards. In Alabama a dental college has just been established under the auspices of a land improvement company, in the interest of land speculators, but they may yet turn out fine students and perhaps some day rival even Vanderbilt. There is no use in antagonizing it. They want students that they may educate them. The State Board only wants to protect the people against empiricism.

Dr. Morgan: I find that I have been entirely misapprehended. He well knows that I am always fighting for higher education. No man has expended more time, more money or more energy in that cause than I have. I do not want to be misrepresented as having cast reflections on the State Boards. I have great confidence in them. I know they are actuated by good motives, and that their influence has been for good. But there are some things that need to be corrected, and therefore I point them out. There is no conflict with the State Boards. It would be a sad thing for the profession if they were abolished—a long step backwards. Some things are not correct, but it is the fault of the dental laws as framed. I am in favor of progress and I am not opposed to the State Boards. Though they have undoubtedly done some very foolish things.

A WARNING CONCERNING THE CHLORIDE OF ETHYL.—In the London Lancet, Dr. H. Radcliffe Crocker calls attention to the fact that the vapor of chloride of ethyl when inhaled is not altogether free from injury.

Having occasion to scarify a small patch of lupus erythematosus on the nose of a young lady, the writer thought it a favorable opportunity to try a chloride-of-ethyl tube. The spot was frozen well enough, but the patient turned pale, slightly livid, and stopped breathing, looking very like a person under oxide gas. As the ethyl was at once taken away, she recovered in a few seconds, but Dr. Crocker states that he will certainly not use it again to any part of the face where it is possible that the vapor can be inhaled. Chloride of ethyl applied by means of a tampon is far safer and easier, but care must be taken not to over-freeze the skin or a dermatitis may be set up.

MISCELLANEOUS AND SELECTED.

FILLING ROOTS WITH GUTTA-PERCHA DISSOLVED IN CHLOROFORM.*

BY DR. R. I. BLAKEMAN, NEW YORK.

It has been suggested by a member of your Executive Committee that it might be of interest and possible assistance to some of the younger members of the profession to hear some testimony on the subject of filling roots with gutta-percha dissolved in chloroform. This solution, depending on the degree of fluidity, is very permea-Perhaps some of you may have experienced getting it on your fingers; if so, you have doubtless noticed how it penetrates the fissures of the skin, and how difficult it is to remove at the time without the aid of a solvent. If an instrument be dipped into it, especially one that is a little rough, the gutta-percha adheres to it very closely, and remains so after the chloroform has evaporated. It sticks to the smooth surface of glass as well, and also to toothstructure. And I might state here, though it does not directly bear on the subject, that it sometimes answers nicely to line gold with against which amalgam is to be placed, so that the gold may not be affected by the mercury. When the fluid is very thin, it seems as susceptible to capillary attraction as water. as some of the canals we wish to fill are very fine, and we feel that they must be filled, as upon this largely depends the future welfare of the tooth, to fill them with this solution seems practical so far as the principles of physics are concerned. For the purpose of describing the process of manipulation, let us consider a molar, the roots of which must be filled from a posterior cavity difficult of access, a somewhat common occurrence. When the roots are dry and ready to fill, it is best to add some fresh chloroform to the solution kept on hand, so that the upper portion is quite thin, while the lower is left very thick. Then with a small broach, with a few fibres of cotton wrapped about the end, the solution can be carried to the canals, and, when the entrance to them is flooded over, it can be pumped in with a small bare broach.

After the canals are full of the thin solution, by dipping deeper into the supply the thicker gutta-percha is obtained, which can be

^{*}Read before the New York Odontological Society, January 17, 1893.



pumped into the canals in like manner, the chloroform being worked out so that it can be evaporated with the chip-blower. If there should be a doubt as to the fluid having gone to the apex of any canal, it can be pushed farther by making a piston of warm guttapercha. But great care should be taken in doing this, and the patient should be instructed to respond to the first sensation, for sufficient force may be brought to bear unconsciously to push the fluid through the foramen. When the canals are sufficiently large to permit of it, it is best to put in a gutta-percha point after they are full of the solution, but not so tight as to cause pressure at the end of the root. It might be well to emphasize this point, as any one not accustomed to filling roots in this way is very liable to force something through the apical foraman, which we all know the importance of avoiding in roots that have never had fistulous openings. My personal experience in following out this method is that I am more apt to do too much than not enough, and after experiencing the results of going too far in some cases, find it easier to stop in time. It will be admitted, I think, that many valuable methods in practice are of additional value because they allow the operator, in case of any trouble, to easily undo his work, and it is on that basis that I claim this method of filling roots to be more advantageous than many others. I experienced the value of this method not very long ago in the following manner. A lower wisdom-tooth, buccal cavity, the root-canals of which were very fine, had been filled as above described. For reasons that have no bearing on the subject, it was decided that the filling should be removed from the roots. This was successfully accomplished by using mechanical means to remove all the gutta-percha accessible; then with a drop syringe the pulp-chamber was filled with chloroform in order to dissolve the gutta-percha remaining in the roots. This was hastened by stirring it up with a broach. It was necessary to repeat this process only two or three times. I have brought with me for exhibition a bicuspid root which was filled in the mouth, and, owing to its being split, it gives us a chance to see how successful the operation was. The gold wire, twisted about the neck, was put there at the time of filling, for the purpose of holding the two pieces together, as the root was already split at that time.—International Dental Journal.

Use equal parts of plaster and hard coal ashes as an investment for gold.

THE KEELEY CURE.

Formulary of the Keeley bichloride of gold treatment, as given by Dr. Chauncey F. Chapman, of Chicago:

No. 1. Tonic known in the institutes as the "dope."
R Aurii et sodii chlorid grs. xij
Strychniæ nit gr. j.
Atrophiæ sulph gr. ‡.
Ammonii muriat grs. vj.
Aloin
Hydrastin grs. ij.
Glycerinedr. j.
Extract fld. cinchon. comp dr. iij.
Extract fld. coca erythrox dr. j.
Aquæ destdr. j.
M. Sig.—One drachm at 7, 9, 11 A. M.; at 1, 3, 5, 7, 9 P. M.
No. 2. The injection known in the institutes as the "shot."
R Strychnæ nit grs. 9 to
Aquæ dest. ad dr. iv.

M. Sig.—Begin with gtts. 5, which equals gr. ¹/₄₀ and increase one drop each injection until the physiological effect is produced. Four hypodermic injections to be given daily, beginning at 8 A. M.; then at 12 M., 4 P. M. and 8 P. M.

Potass. Permangan. q. s. to color.

No. 3. Used with No. 2.

- M. Sig.—Gtts. 3 every four hours in combination with the etrychnine solution, for the first four days.

This last prescription is used only for the moral effect, which is produced in the following manner: Five drops of the strychnine solution are drawn into the syringe, and then three drops of the gold solution are drawn in and mixed. This produces a golden yellow color, to which attention is called, and the patient is further assured as to the reality of the presence of the gold by the stain left on the skinafter the hypodermic needle has been removed.

Dr. Chapman is now treating a number of these cases and will report farther in the matter. He is positive that, if properly and scientifically conducted, good results can be obtained. —Kansas Medical Journal.

TRY pyrozone for abscessed teeth and putrescent canals.

DR. C. F. IVES, NEW YORK, ON PULP CAPPING. -I endeavor to avoid all pressure. A piece of very thin aluminum—this because of its purity and lightness—a bit of hard wood, apple seed, or shot-head burnishers, and in a moment a concave cap is prepared to fit the case (this dipped in varnish); the cavity bathed with oil of cinnamon (not oil of cassia, which is the Chinese product, but the Ceylon oil, which you will know, because it will cost you two dollars an ounce), for which I have discarded all other antiseptics in cavities, because it is safe, effective, and pleasant. The cap, always large enough to rest outside the line of the chamber, is covered with a layer of "Fletcher's Nerve-Capping." If you do not use it, let me urge you to try it. For thirteen years it has proved in my hands an efficient aid in all such cases. It is an oxysulphate of zinc, nonescharotic, and hardens sufficiently in three or four minutes to pack any material upon. It is a beautiful temporary filling, wonderfully nice for cavity lining, and, in combination with any good antiseptic, an excellent root-filling. I always cover my application of arsenical paste with this cap and Fletcher's material, avoiding all pressure. Dr. Miller, of Berlin, has recently spoken very enthusiastically of it.

Let me tell you of an excellent varnish. Procure a piece of clear amber, scrape or powder it, dissolve in Squibb's chloroform, which will take some time, add a little absolute alcohol to delay evaporation, and you have a varnish so hard that it will resist almost anything.

TROUBLES OF DENTITION.—In the France Medicale there is reference to Gilbert's recent paper upon the troubles of dentition, which embraces an analysis of observations made upon a thousand children artificially fed, and upon five hundred infants naturally nourished. The author concludes that children brought up on the breast are almost entirely free from diseases attributed to dentition, only two of the five hundred showing any such abnormity. But among the other one thousand there were fifty-eight cases of simple stomatitis, one hundred and thirteen of ulcero-membranous stomatisis, and twenty-eight cases of convulsions. Dentition is never properly accomplished without the act of sucking the maternal nipple, which favors the physiological waste of the gums. There is no such thing as diarrhee due to dentition.

PATIENTS with albuminous urine are easily intoxicated with cocaine.

PETERSON (F.) ON CLONIC SPASM OF THE MUSCLES OF MASTICA-TION.—Patient a woman, aged fifty-seven, who six years before had had all her upper teeth removed and artificial ones put in. The first set did not fit well, and a new one was substituted. The work about the mouth, and the necessity for keeping her mouth open for long periods of time while she was in the dentist's chair, resulted in the development of this spasm. When she was sitting quietly, not using the jaw muscles, there was a continuous clonic spasm of the masseters, temporals and ptervgoids. The jaw opened and shut slightly and moved from side to side. She was tired and worn out with trying to keep her teeth together. The chief difficulty, however, was when she attempted to speak; then the mouth opened wide and there was a subluxation of the jaw downward and forward from the glenoid cavity. During the first six months the mouth would not close at all, except at night, when the spasm relaxed.

Dr. Peterson says that while clonic spasm of the masticatory muscles or trismus was quite a common symptom, the condition presented in this case was very rare. As regarded treatment, atropine, hyoscine, conium, and electricity had been used perseveringly without any special effect. Latterly sulphate of duboisine, in doses of one two-hundredth of a grain, three times daily, had afforded much relief by quieting the spasmodic movements almost wholly at times. In addition she wore an apparatus made especially for her, which kept her jaw closed and allowed her to talk between her teeth without the uncomfortable clonic spasm of the depressors of the jaw, although the chronic movements of the masseters and pterygoids might keep on as before. The movements ceased at night. The affection had lasted nearly seven years.

MR. Humby, speaking of pyorrhœa alveolaris, said that he thought that the cause was generally mistaken; he thought that the disease was caused by death of a portion of the cementum in the root, and the lacunæ became charged with septic material, and thus set up irritation of the gum and absorption of the alveolus, and thought that if some drug was used that would coagulathe the albuminous contents of the lacunæ, the disease might be arrested; and he mentioned a case in practice in which he had successfully used nitrate of silver, thirty grains to the ounce.—British Journal.

BRIMMER (DR.) ON THE FUSION OF GUM SECTIONS.—The teeth are ground up and articulated the same as any other case with this provision, that they must have wide V-shaped joints to allow for the rapid flowing of the flux or enamel. Then after the teeth are arranged in position and articulated properly, there is an investment with half plaster and half asbestos. After this has hardened and dried sufficiently, a little platinum wire is laid across the platinum pins, and that is fused with the blowpipe, which gives it an added strength. Then take that and the skeleton and invest the joints with this enamal material, putting it in the oven, or rather on the There are three different movements in the gradation of the heat, as it gradually comes to the fusing point. The slide is left in first position about three minutes, and at the end of three minutes it is raised one-third more of the distance, and at the end of three more close it. When you get it in the oven allow it to remain there fifty-five seconds. This same operation with gas will take about five minutes, so you see there is quite an item in the amount of time saved. This operation gives quite a respectable appearance to a set of teeth on rubber. It gives the plebeian base quite a patrician appearance, and it has almost the appearance of continuous gum.— Extract Review.

DR. W. C. BARRETT, in Practitioner and Advertiser, says:

"The Dental Cosmos is undeniably and indisputably right in criticising the babbling, tattling, personal gossip contained in the letters of some journalistic correspondents. They have been a source of annoyance and irritation in professional circles for some time, and self-respecting journals should not give place to them. Legitimate professional news, and dignified, unbiased comments upon professional events, prepared by competent writers who have a speaking acquaintance with Lindley Murray and his successors, are quite in accordance with proper journalism. But personalities, and impudent impertinences concerning private matters with which the public has nothing to do, should be left to the cheap and nasty sensational newspapers, which make a dirty living by invading the the sanctities of private personal life. Our reputation as a learned and dignified profession depends very largely upon our journals. When one of them becomes an offender in this direction, the others share the reproach if they do not openly and unreservedly condemn it."

Dr. Samuel J. Hayes will soon issue a new book on anæsthesia.

WORTH READING.

Just a word to those good doctors,
Who are meditating deep,
On a paper they're preparing,
Full of thoughts too good to keep—
Boil it down.

'Tis not words, but facts we're wanting,
Therefore prune and pare with pains
Your scholastic evolution,
Till an essence pure remains—
Boil it down.

Welcome every fresh advancement, Hail each new discovered fact, But in writing a description That attention will attract— Boil it down.

And remember that discussions
Are of interest all agree;
So your paper should invite it;
Make it short as well may be—
Boil it down.

-From the Journal of American Medical Association.

ODONTOLOGICAL SOCIETY OF PENNSYLVANIA.—Dr. S. R. Bartlett exhibited a small gas furnace, made by the Detroit Dental Manufacturing Company, designed for baking porcelain fillings and crowns. The muffle, which is made of platinum, is just large enough for one or two teeth, and has a platinum tray for holding the piece to be baked. Dr. Bartlett gave a demonstration of the use of this furnace by baking an incisor crown in just two minutes. The tooth used was an ordinary plain rubber tooth, with iridioplatinum dowel held in position between the pins of the tooth, the band for the root being made of platinum with an investment of silex and plaster which surrounded the upper portion of the dowel and inner space of the band. The tooth thus invested was formed to the proper contour by Allan's continuous gum body, which covered the labial part of the band and was made continuous with the neck of the tooth. The crown was then baked; the time required for heating, baking and cooling being about ten minutes. By this process of making crowns-which Dr. Bartlett does not claim as original—the objection to having the metal band show when the gum recedes is obviated.

ELROY (CHAS.) ON HOW TO TREAT COCAINE POISONING.—Your first duty is to prevent syncope, afterward to combat respiratory and cardiac collapse. The therapeutic means of doing this are unfortunately very few. At the very beginning place the patient in a perfectly horizontal position, which will diminish the force of the syncopal condition. Sprinkle ice-water over the face, and to prevent convulsions envelop the body in cloths wrung out of cold water.

If asphyxia threatens, practice flagellations with wet towels, massage, artificial respiration.

Against tetanization of the respiratory muscles give inhalations of chloroform.

Where there is great pallor, provoke vaso-dilatation, modify the arterial pressure, and diminish the encumberment of the central circulation, by the administration of amyl nitrite (by inhalation.)

If these means prove ineffectual, and deglutition is impossible, give hypodermic injections of caffein, and of sulphuric ether (15, 30, even 45 minims).

In a word, bend your efforts toward moderation of reflex excitability of the nervous system, sustain the heart, and re-establish the equilibrium of the blood-pressure. The treatment of acute cocaine-intoxication is particularly and above all a case for arterial medication.

Commenting on the foregoing, M. Choupe (Bulletin Medical) counsels in addition the use of hypodermic injections of morphin. These should be given only in the very outset, however, and should be only sufficiently large to produce the physiological effects of the drug, say from one-half to five-eighths of a grain.—Revue de Clinique.

It is the opinion of Dr. Rhein that "where gold is added to amalgam it does not produce a disintegrating effect, but makes a gold amalgam. The addition of amalgam to gold is different, because of the affinity of the mercury in the amalgam for the gold acting continously, destroying and disintegrating the homogenous qualities of the gold, but not producing a perfect amalgamation."

EUCALYPTOL, the ethereal oil of eucalyptus, has a peculiar action on the suppurative process. It paralyzes, as has been ascertained, the white corpuscles as soon as they have penetrated the blood vessel wall during inflammation. The process of tissue disintegration is hence checked by this drug.



THE ANTISEPTIC ACTION OF TOBACCO.—As to the antiseptic action of tobacco, Professor Tassinarini, in Rome, calls attention to the fact that as far back as in the seventeenth and eighteenth centuries, the use of tobacco was recommended by many physicians as a prophylactic in times of epidemics. In 1842 Professor Ruef. in Strasburg, it is said, stated that all the workingmen employed in the Royal Tobacco Manufactory had remained exempt from contagious diseases. Recholier made the same observations in 1883 and Walter Cock, of Texas, in 1889, even recommended tobacco smoking as a preventive against tuberculosis. Dr. Vassili, of Naples, in 1888, experimented on a balloon in which a layer of gelatine was sprinkled with comma bacilli. As soon as the smoke from one to four cigars, according to the intensity of the tobacco, was introduced into the balloon, the micro-organisms of the gelatine were completely killed. These various experiments were imitated by Tassinarini and he found that by tobacco smoke the comma bacilli, the bacilli of pest and of pneumonia are destroyed, or, at least, arrested in their development. In these experiments it was observed that the bacilli of cholera and of pneumonia were destroyed within a few minutes, while the bacillus of pest offered more resistance, and while the bacillus of typhus was scarcely interfered with. Tassinarini also affirms that smoking delays caries of the teeth.—Intr. Phar. and Gen'l Anzeiger.

THE THERAPEUTIC USE OF SYRUP OF CHLORIDE OF IRON (Ved.) Owing to its destructive action on the enamel of the teeth and liability to disturbance of the stomach, the tincture of iron is objectionable. It may be advantageously replaced by the syrup. In this preparation the excess of acid is neutralized by an alkali, and while still presenting an acid reaction, it does not attack the teeth nor discolor the tongue. When it reaches the stomach it meets the free hydrochloric acid, and becomes therapeutically identical with the tincture. The syrup is more assimilable, and gives rise neither to nausea nor digestive trouble. Dose, one-half ounce, three times a day.—Times and Register, from La Medecine Moderne.

DR. WILLIAM H. HAYES, of 804 Penn. avenue, Pittsburg, Pa., died, July 10th, of consumption, aged twenty-four years. The deceased was the only son of Dr. Samuel J. Hayes. He received his education at Baltimore University. He was a most estimable young man and was highly respected.



THE

Southern Dental Journal and Luminary.

A MONTHLY PUBLICATION

DEVOTED TO THE INTERESTS OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. Johnson, 306 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to Drs. W. R. Holmes & Mason, 556 Mulberry St., Macon, Ga.

Editorial.

EXAMINING BOARDS, LICENSES AND DIPLOMAS.

This momentous question is still before the profession of America, unsolved and unsettled. Will the meeting of the World's Dental Congress succeed in so enlightening the subject, that a standard of qualification may be fixed, that a practitioner may be supplied with credentials that will entitle him to practice without further questioning in any part of this free country, so long as he conforms to a liberal code of ethics? While I hope so still, I am afraid the result will be disappointing. This code of ethics should be formulated, agreed to and adopted at this representative meeting. If this is not practical a national code should be agreed to and adopted as soon as possible by our two representative bodies the American and Southern Dental Associations. After agreeing to and fixing the bounds and defining the latitude which practitioners will be allowed, then steps can be taken to fix the standard of qualification credentials, etc. That harmony should exist all agree.

A practitioner in one State who is practicing according to law and the rules of the *adopted* code of ethics should be allowed to practice in any State of the Union simply by exhibiting and proving the genuineness of his certificates without further examination or questioning. That such a harmonious state will ever exist be-

tween the different countries can hardly be hoped for, but there is no reason why it should not exist between the States and the fact of its not existing shows a lack of confidence and liberality somewhere. If a code of ethics could be agreed to and the vital points in State laws could be made uniform the object would be practically accomplished without any further legislation.

The necessity for this change has been made manifest by the interest which has been exhibited by the various State societies that have discussed the subject during the year. Various methods and ideas have been advanced. Probably the most novel to which my attention has been called is that of Dr. W. E. Walker, presented before the Mississippi State Dental Society. His idea is to create a National Board, to be composed of one representative from each State Board, who shall meet once a year, examine candidates and issue licenses that shall be recognized in every state. While this is a novel and original idea, and was favorably received and discussed by the society at the time, I do not think it practical and therefore it cannot be utilized.

Agreeing to and obtaining a uniformity of State laws will be the means of accomplishing the result. As long as such a variety exist as is now the case, it is almost practically impossible. No one should be allowed to enter the profession in this day who has not obtained a degree from a reputable college (one that conforms to the rules of the National Association of Dental Faculties), therefore no board should be allowed to examine a candidate who has not obtained a diploma. A proviso being inserted that will provide for old men who have been practicing before the laws were passed. Every State law should require all to pass an examination before the Board who do not hold both a diploma from some reputable college and license from some other Board.

The possession of both a license and a diploma should be evidence of qualification and should entitle one to practice without further examination in any State in the Union.

Colleges should be invested with the power of revoking its diploma and degree when it has been insulted and abused by unprofessional conduct, by open and wilful violation of the code of ethics. Clauses in State laws should also provide for the same in regard to licenses, and these laws should be enforced. Until attention is paid to these vital points in State laws, no harmony in regard to qualification to practice can ever be reached or established between the States, and we can do no better than to let well enough alone.

"Mr. And Mrs. B. J. Tarbutton give in marriage their niece-Minnie Bell to Dr. W. L. Cason, Wednesday evening, August the ninth, eighteen hundred and ninety three, at eight-and-a-half o'clock. The honor of your presence is requested. Baptist Church, Sandersville, Georgia."

We take pleasure in acknowledging receipt of the above invitation. Dr. Cason is a young man of ability and is building up a good practice and making progress in his chosen profession. We extend to the happy couple our hearty congratulations.

FAILURES in crown work are often due to the mistake commonly made of using too soft gold. Many operators use ready made seamless crowns of twenty-two and twenty-four karat gold. These golds are not alloyed with metals that would tend to stiffen them from the fact that it would increase the difficulty of stamping them up. A stiff gold of a sufficiently high karat to prevent discoloration in the mouth, though harder to adjust and fit, will always prove more durable and less liable to stretch during the process of fitting and from the force of mastication after it is finished. When these soft crowns are used it is best to stiffen them well by flowing a thin layer of high karat solder over the outer surface before cementing to place. Where the operator possesses the requisite skill it generally better and safer to make each individual crown to suit the The different solderings of the band and top all have the effect of stiffening and hardening the gold so that by the time the crown is complete it is sufficiently rigid to prevent its being stretched from use.

"BEFORE introducing the syringe needle," says Dr. N. S. Hoff, "it should be dipped into a strong solution of carbolic acid, then washed in a five per cent. solution of it, which should not be wiped off, for if a drop remains on the point when it touches the gum it will paralyze the tissue so that the needle will not hurt when inserted." These are excellent suggestions.

FOR SALE.—In a healthy Southern sea-port city, a dental practice of several years standing. Cash receits from \$2,500 to \$3,000 a year expenses small, only one other dentist in the county. Will sell for cost of furniture and dental outfit. One-half cash balance six and twelve months. Failing eyesight is only reason for selling.

Address,

VALENTINE,

Care Macon Dental Depot.

Correspondence.

JACKSON, MISS., July 11, 1893.

Dr. H. H. Johnson, Macon, Ga.:

DEAR SIR—As a solution of the matter brought up by Dr. Walker, at the meeting of the Mississippi Association and published in The Southern Dental Journal and Luminary in June number, page 277, concerning an International Examining Board I would suggest the following rough plan, which of course will be reformed and worded. I only hope to convey my idea.

First, let all the State Boards that care to enter into such a plan have an uniform law enacted, and formulate among themselves uniform rules and regulations for issuance of license under such law. Say let each board agree in writing to recommend no person except he has been in actual practice for at least five years, is a member of some association, has never wilfully violated the code of ethics and is a reputable dentist. Then have the applicant sign an agreement like this; that he will not violate the code of ethics as now written or as may be hereafter written. If some such plan could be brought about and we could have enacted a law something after the following, I think it would afford, safely, the relief desired.

1st. From and after the passage of this act the Board of Dental Examiners of the State of ————, may issue, without examination, license to any person who has had at least five years of actual practice, who appears before said Board recommended by the Board of Examiners of the State in which he resides.

2d. The Board may fix such rules and regulations for its government as it may see fit, provided it is uniform with those of other State Boards. All boards to receive the benefits of this act must subscribe to the same.

3d. The Board may determine which State or States it will recognize and reserves the right to refuse recognition to any and all if it sees fit to do so.

4th. The Board shall ever reserve the right to revoke all licenses issued under this act for incompetency or any violation of the agreements by which the license was issued.

If you think any good would come of the rough suggestions you may publish them in whole or part.

Let every State keep her own quacks and let the reputable and qualified dentist roam at large. Yours very truly,

J. H. MAGRUDER.

P. S.—When I wrote you I had some doubts as to a license issued by a board being revoked, but since then I have consulted an attorney who tells me, that any license can be revoked if the law so provides.

It would be a good idea I think to have a provision of this sort in all laws whether any special laws, such as I wrote and suggested are enacted or not, then we could shut out the quacks.

Yours truly,

M.

There are some good practical ideas advanced in the above which I hope some day to see carried into effect. Editor.

DIRT TOWN, Ga., '93.

Mr. Editor.—I have been thinkin' ever since the meetin' in Atlanta that I would write you my impression of things connected with it, especially as it was the first meetin' I ever attended. There is a dentist in Atlanta who calls us fellows who don't attend meetins "moss backs." We may be such, but I tell you some of those fellows at that meetin' must have moss on their backs. I was talkin' with some of them, and found out they don't take any journals, but depend on "sample copies." Now, sir, I propose we call all such "Sample Copies." The idea of a man who pretends to be somebody in dentistry, one who gets up in meetin' and talks about how I do this and how I do that, and yet don't take a journal. Well, I tell you what's a fact, I'd rather be a "moss back" than a "sample copy." Well, sir, it done me good in the sleeves to set and listen at them sample copy fellows spoutin', when I could have got up on that floor and knocked the socks off them. They say some of them are professors, too. Well, now, I pity any school that has "sample copy" professors. One fellow was asked what journals he took. "Why," said he, "I take the Copyist and get all the others; they send them to me." When I found out what the Copyist was, it proved to be a dental depot advertising sheet and sent free, or with some amalgam as an offer to introduce it. You may just call me "moss back" if you want to, but I can beat that fellow on some things. As ignorant a man as me can see that the sample copy dentists are simply mechanics.

I never attended a meetin' before, and I must say that I was not much impressed with what I saw and heard. Some young fellows was bent on airin' themselves before the Association. Why, they kept poppin' up on all occasions. (One fellow, somebody said he was a professor, took a half hour to tell how he treated a root

when it discharged and how he handled it.) Why, that could have been said in ten minits.

Well, sir, I got so full of wind at that meetin' that I like to busted when I was comin' home over the rough roads. The president just set there and let a man (somebody said he was a big professor) talk and talk and talk. He said some good things, but I tell you I thought if I was in that president's place I would called him to short order. That's the way we do in the Caledonia Debatin' Society; we just choke such fellows off. But let me tell you, our president is a ruler, he is. The president was a mighty fine lookin' Every inch of him was surely a gentleman, but I tell you he needs lessons under our president. Why, sir, our president sets with his Waterbury on the table, and when a fellow has spoke as long as he thinks he ought, 'specially when he sees the meetin' gittin' tired, he just says: "Set down, Mr. Windy; the Chair will now hear Mr. Grind." And if Mr. Grind begins to hit a halleluis lick, as if he was set in for an hour, the president just calls him down, and re-cog-nizes somebody else.

Some of them fellows about Atlanta showed off powerfully. Them Macon fellows was mighty anxious to show off too, but them Atlanta fellows just kept the floor all the time. They didn't know that they were the hosts, the Macon fellow the guests, and they aut to give way. You see some of them fellows are professors, and some editors, and all had to show off. They wanted the Constitution to say something big about them. Well, I did see when the paper said one of them was professor of "prehistoric dentistry."

Now, sir, will you please tell us, in this neck of woods, what sort of a professor that is. A prehistoric fellow. Well, Atlanta is bound to keep ahead. I think Ile go up next winter and hear that "prehistoric" fellow. It must be somethin fine and brand new. A new way of puttin in teeth, I recken. He can't tell me anything about bilin a rubber plate, but he can on "prehistoric."

Well, I had a good time a seein' sights in Atlanta. Them fellers never carried me a ridin' like they did you, Mr. Editor, but I has powerful good feet and I used them. And then my clothes was kinder plain.

But, law me, when I got a good lick at that supper, the only objection, they didn't bring in the things fast enough, and not enough at a time. Some of them speeches was good and some wasn't; one was as long as the decleration of independence. 'Twas a good talk, but that man shore thunk a heap of himself I am mighty bad on rememberin' names, but that big, fine-lookin' At-

lanta fellow. Why, he could run a show. He tickled me good fashion. I wished that fellow that led the meetin' had asked me to speek. I was just chock full and could have made it hit the mark.

That was my first meetin' and I don't know that I will attend another one, but if I can find time from my "heavy practice" I will write you again and tell you how to get the moss backs interested in meetin's. I saw enough to know some things.

Yours.

Moss Back.

P. S.—You've made a powerful improvement in the JOURNAL. I like its make up and get up.

DENTAL JURISPRUDENCE.—The somewhat novel suit brought in the district court at St. Paul, by a dentist, D. D. Smith, against William Woolsey, to recover for a set of teeth, said to have been made by the plaintiff for the defendant, and for which the defendant has refused to pay, has been decided by Judge Kelly. The decision discharges the order to show cause why Woolsey should not give up the teeth to the sheriff to sell at public auction to the highest bidder, and thus afford the plaintiff relief. The judge holds that the teeth, as long as they remain in the mouth of the defendant, are a part of his anatomy and cannot be seized, but should they ever, by chance, fall from the mouth of Woolsey into the hands of the vigilant deputy sheriff, the plaintiff can cause them to be seized and disposed of.—Den. and S. Microcosm.

Dr. Meriam.—I have had almost no experience in this bridgework, and, I am very thankful to say, quite a limited experience in crowning. But from what I have seen it has appeared to me that we depended too much on soft preparations of gold for the support of bridge-work, and that the tendency of gold to spread in wear is a very important cause of the failure of such work. If some of the bridge-work was started with a little stiffer form of gold, there would of course be more trouble in fitting, but it would undoubtedly give better wear. The amount that a piece of twenty-two-karat gold will yield is considerable.

THE soldering of aluminum which has long been a difficult problem, has recently been solved. By sprinkling the surface to be soldered with chlorid of silver, and melting down, the soldering is effected simply and satisfactorily.—Ohio Journal.

SOCIETIES.

COMMITTEES OF SECTIONS MISSISSIPPI STATE DENTAL SOCIETY FOR 1894.

Surgical Dentistry.—Morgan Adams, Sardis; T. B. Birdsong, Hazelhurst; E. E. Spinks, Meridian.

Prosthetic Dentistry.—A. A. Wofford, Columbus; J. C. Spivey, Vicksburg; J. E. Suber, Crystal Springs.

Phisiology and Histology.—W. H. Marshall, Oxford; W. A. Guess, Greenwood; E. L. Holmes, Bentonia.

Dental Materia Medica.—R. K. Luckie, Holly Springs; Walter Jones, Jackson; W. E. Walker, Bay St. Louis.

Pathology and Therapeutics.—Geo. D. Clements, Macon; J. A. Warriner, Corinth; S. R. Wyse, Meridian.

Dental Chemistry.—W. T. Martin, Yazoo City; J. O. Frilick, Meridian; W. T. Allen, Amory.

Dental Metallurgy.—D. B. McHenry, Grenada; C. R. Reucher, Enterprise; L. A. Smith, Port Gibson.

Dental Education and Literature.—J. D. Miles, Vicksburg; W. T. Stewart, Fayette; Frank H. Smith, Grenada.

Incidents in Office Practice.—W. W. Westmoreland, Columbus; R. S. Moffat, West Point; W. L. Stovalle, Winona.

Clinics.—Geo. W. Rembert, Natchez; J. H. Magruder, Jackson; A. A. Dillehay, Meridian.

Voluntary Papers.—Wm. Crenshaw, Atlanta, Ga.; M. C. Marshall, Little Rock, Ark.; J. G. McColough, New Orleans, La.; J. J. R. Patrick, Belleville, Ill.; Wm. H. Morgau, Nashville, Tenn.; L. D. Carpenter, Atlanta, Ga.

Invitations.—E. B. Robbins, Vicksburg; T. O. Payne, Vicksburg; I. B. Rembert, Jackson.

Executive Committee.—T. C. West, Natchez; Geo. W. Rembert, Natchez; P. H. Wright, Sanatobia.

FLORENCE, S. C., June 10th, 1893.

The Twenty-third Annual Meeting of the South Carolina State Dental Association will be held in Columbia, Tuesday, August 8th, 1893, continuing four days. All members of the profession are invited to be present. CHARLES S. PATRICK, *President*.

B. RUTLEDGE, Recording Secretary.



Book Notices.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS, WITH ESPECIAL REFERENCE TO THE CLINICAL APPLICATION OF DRUGS. By John V. Shoemaker, A.M., M.D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital; Member of the American Medical Association, of the Pennsylvania and Minnesota State Medical Societies, the American Academy of Medicine, the British Medical Association; Fellow of the Medical Society of London, etc., etc. Second Edition Revised. In Two Royal Octavo Volumes. Volume I, 353 pages: Devoted to Pharmacy, General Pharmacology, and Therapeutics and Remedial Agents not Properly Classed with Drugs. Volume II, 680 pages: An Independent Volume upon Drugs Volume I, in Cloth, \$2.50 net; Sheep, \$3.25 net. Volume II, in Cloth, \$3.50 net; Sheep, \$4.50 net; Philadelphia: The F. A. Davis Company, Publishers, 1914 and 1916 Cherry Street.

New remedies and modes of practice are being so rapidly introduced into materia medica, no work can long remain adequate to the needs of the general practitioner, who makes any attempt to keep up, without revision. The first volume of this valuable work seemed to be complete at the time of its publication, but the author soon found, and indeed the profession soon demanded a revision. The first volume of this revised edition covers a scope almost amounting to a principle and practice, and is a very interesting feature of the work. It is a valuable work taken as a whole, thoroughly revised and modernized, which brings it right up to the present time.

THE RISE, FALL AND REVIVAL OF DENTAL PROSTHESIS. By B. J. Cigrand, B.S., D.D. S., Professor of Prothesis and Metallurgy in the American College of Dental Surgeons, Lecturer in the Post-Graduate Course, Member of the Illinois State Dental Society, etc., etc. Fully annotated and illustrated. Second Edition. Revised and enlarged. Chicago: The Perodical Publishing Co., 434 Wabansia ave.

The demand for a second edition so soon after issuing the first, must be evidence of popularity. The first edition, says the author, was entirely exhausted, with the exception of one hundred copies, in Chicago.

There are a few errors, which probably could not easily be avoided, otherwise the work is very novel and interesting. There is a short chapter devoted to Dental Art in the various countries, and winds up with a short history of American Dentistry, giving a list of the colleges and dental journals. The book is illustrated

with three full page plates, the cuts being a reproduction of cuts which have appeared in the various dental journals, showing specimens of ancient and modern dental art. The frontispiece shows an engraving of Dr. Joseph Lemaire and a cut of the Art Institute, Chicago, where the Dental Congress will be held.

LETTERS FROM A MOTHER TO A MOTHER ON THE CARE OF CHILDREN'S TEETH. (Columbian Edition). By "Mrs. M. W. J." Published by the Wilmington Dental Manufacturing Co., Philadelphia, Pa. Price 25 cents.

The fourth edition of this little work, revised, has just been issued. No book of its size, pertaining to dentistry, has ever been written that is calulated to do as much good as this work if it could be circulated where most needed. Thousands of mothers and children to-day are laying a foundation for untold misery and suffering and permanent personal injury by being deprived of the information contained in it. We hope it will be liberally bought and distributed.

The following were elected officers of the North Carolina State

The next meeting will be held at Durham, N. C., the first Tuesday in May, 1894.

THERE is a movement on foot in this State to empower the State Board of Health to "cause an examination and analysis by a practical chemist, of any drug, medicine, or mixture of drugs, herbs, or medicines commonly known as patent or proprietary medicines, in order to determine if the use of such medicine may endanger the public health." This is a movement in the direction of health and morals, and if successfully carried out will save suffering and life.

At the forty-first annual commencement of the Woman's Medical College, Mrs. Mary E. Mumford, President of the Corporators, awarded diplomas to forty-seven women, the largest class that has ever graduated from the college.

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OBTUNDING SENSITIVE DENTINE—BEST METHODS.*

BY DR. E. K. WRIGHT, WILSON, N. C.

Sensibility of the dentine, by either local or general means. Should arsenic ever be used?

First: Let us see what is meant by "sensitive dentine." And by "sensitive dentine" we mean an abnormal sensitiveness of this structure.

Some may say, it is an *irritation* of the dentinal structure and soon subsides upon the removal of the irritating causes; and others may say it is *inflammation* of this structure; but in *inflammation*, we are told, we must have symptoms of redness, heat, swelling and pain.

In the tooth surely we do not find much "redness" (except in one case, I remember to have extracted, the entire dentine was very red), and very little, if any, "heat," and certainly no "swelling," but lots of "pain." I do not see exactly how we can call it inflammation, with this understanding; but in the absence of a better word, we will admit that it is such. Well, next, let us look at the causes. I should say, in a measure, inflammation of the dentine was due to exposure of the structure, consequent upon the breaking down of the

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[•] Read before the North Carolina State Dental Society, May, 1893.

enamel, or protective covering, or by sympathy, and its degree will depend upon the organic structure of the teeth, susceptibility to irritation and the nature of the irritating agents. Teeth that are very vascular and highly organized are often extremely susceptible to the action of irritating substances, and such a state of extreme sensibility may at times be occasioned by disturbances of other and remote organs, such as the uterus, for example.

The direct cause is irritation of the fibrilæ which occupy the dentinal tubuli and canaliculi (that we hear so much of at college) and which, we are told, ramify from the pulp chamber of the tooth to, and sometimes beyond, the peripheral surface of the dentine; hence, we can see why it is that the greatest sensitiveness generally is found where the union of the dentine and enamel occur. for the reason that at this point the nerve fibers terminate, and, too, this accounts for the greater sensitiveness in dental caries in its incipient stages, as I understand it. Then, from this standpoint, knowing that these fibers (or fribrila I should have said) run thus, it looks reasonable that the dentine ought to be endowed with the functions of absorption, nutrition, and secretion, modified by the density of the tooth structure, as I said before, we should be exceedingly careful of the treatment to be used. Inflammation of the dentine is very hard to diagnose, since, the teeth in a state of inflammation will suffer pain when subjected to sudden variations of temperature, whether induced by air, by fluids, or by contact with some hard substance; and, also, when brought in contact with agents that irritate the nerve tissue anywhere, such as acids, some alkalies, salts, etc., (as in the Robert Herring case.)

Now, after having gone over, and in part, found out the causes of this trouble, we take up the treatment, for as I have found, in my experience, it is always better to know what you are going to do, before you attempt to do it, so in like turn it follows: "Relieve the cause first, and nature will help you in the cure. We have heard and read of lots and cords of treatments, such as chloride of zinc, chloroform and aconite, equal parts; oil of cloves, oil of encalytus, tannin combined with glycerine or camphor, chloral, camphorized ether, oxid of calcium, carbonate of sodium, menthol, thymol, sulphate of morphine and gum camphor, equal parts, carbonate of potash and glycerine, carbolized potash and numbers of others too numerous to mention. In my own experience, the tannin and glycerine preparation is very good, in most cases pure wood creosote is sufficient; carbolic acid acts in the same way and is also good and I may say, are among the safest of remedies. I have found the insertion of a

temporary filling of oxychloride or oxyphosphate of zinc or Hill's stopping or by the use of non-conducting agents, as chloro-percha, asbestos, etc., to be very beneficial.

But, again to our subject. "Should arsenic ever be used?" I should answer most emphatically, no.

I confess, I have used it in cases of extreme sensibility; but in each case, I would invariably destroy the nerve and fill as a dead tooth before leaving it, in fact, I think in such cases it is much better to destroy the entire nerve. But, in no case would I think it advisable to use any amount of arsenic, for the shortest time, to partially destroy sensibility of the dentine, since it requires such a very. very accurate knowledge of the peculiarity of the structure of the tooth as the dangers of absorption, etc., are so many that the entire nerve of the tooth may be destroyed and, hence, an extra amount of work to the dentist, (to say notning of the blame) and costs to the patient, besides, having, possibly in the front of the mouth, a tooth that will in time turn black. Of all the agents I have used in my practice that gave perfect satisfaction in not only relieving sensitive dentine, but in hardening the teeth in cases of chalky, soft teeth, is lime water—simple lime water. But the nicest way to use it is to take the old Harris Mouth Wash (which we all know) and instead of using the five (5) pints of pure water as he suggests, use five (5) pints of lime water. The medical properties and action of which, are: Antacid, astringent, antiseptic and detergent. I have used this wash for two or more years in special cases with the greatest satisfaction. (Liquor-Calcis), I use freshly slacked lime by pouring cold water on it and letting it stand over night, (about four (4) troy ounces of saturated solution of lime in eight (8) pints of (distilled) water.

In one case, a patient of mine was in Charlotte and taken very sick and given all kinds of medicines, and, at the same time, a complete wrecking of the whole constitution, and, of course, as naturally follows, a softening of the tooth structure and dropping out or leaking of all the fillings began. She was a patient that thought lots of her teeth and came at once to see what could be done. I filled all back teeth with amalgam (front with gold), and started her to using this wash; in a month's time her teeth was so hard I could not tell they were the same teeth. But, with this you must be careful to know that the tooth needs hardening, if not, I use the plain "Old Harris Mouth Wash." That, within itself, is as good as can be made, except in extreme cases of which I speak.

THREE CHEMICAL COMPOUNDS RECENTLY BROUGHT TO THE ATTENTION OF THE PROFESSION, AS FOL-LOWS: PYROZONE, SODIUM PEROXID, DR. SCHREIR'S PREPARATION OF SODIUM AND POTASSIUM.*

BY DR. I. N. CARR, TARBORO, N. C.

Pyrozone, of which there are three prepartions on the market, towit: Medicinal, antiseptic and caustic. These solutions consist accurate per centages of H2O2 (peroxid of hydrogen) in water and The first, or medicinal pyrozone, contains 3 per cent. of H. O. in water. It is a general disinfectant, is said to be stable and of exact strength. The second solution, known as antiseptic pyrozone, contains 5 per cent of H2 O2 in ether, its name, of course, indicates its use. As an antiseptic it is very powerful, acting upon pus with great energy; the rapid evaporation of the solvent ether, leaving the concentrated H2 O2 behind. As a tooth bleacher it is very satisfactory. Its action is very much more powerful than that of the 3 per cent. or medicinal, on account of the solvent. Caustic pyrozone contains 25 per cent. of H₂O₂ dissolved in ether. used for the same purpose as the antiseptic or 5 per cent. solution, but is much more powerful in its effects. Its action, when applied to healthy skin, is described by Ottolengui as causing a slight tingling sensation, and a marble whiteness, similar in appearance to that produced by carbolic acid, but with this difference: the caustic pyrozone discoloration disappears after some hours, leaving no trace upon the skin or other bad effects. This agent is largely used, as it is, perhaps, the most powerful, as well as the safest caustic known.

Peroxid of hydrogen, under symbols H₂O₂, has been used by the dentists for several years in the treatment of abscesses and suppurating surfaces, but it has not been altogether satisfactory on account of its being unstable, it could not be relied upon at all times, it would lose its strength and become worthless after a short time. The pure article is a liquid of a higher specific gravity than that of water, consequently, the common term "15 volume solution" is very misleading, and as a fact, we are told, that the analysis shows that instead of 3 per cent. of the peroxid which they should contain, they seldom show more than 2 per cent., and very frequently but 1½ per cent., or but one-half the proper quantity. In

^{*} Read before the North Carolina State Dental Society, May, 1893.

medicinal pyrozone we always have three per cent. of the pure peroxid of hydrogen by weight, and the solution being in water, it is stable and of exact strength. This, however, cannot be said of either the 5 per cent. or 25 per cent. solutions, which are etherial: though to guard against evaporation, they are put up in glass tubes, which, of course, after being once opened, must be transferred to a clean glass stoppered bottle; and, notwithstanding this precaution, repeated opening of the bottle allows the ether to escape. It is to be hoped, therefore, that the manufacturers will soon put these preparations on the market in smaller tubes. so that the expense of using them will not be so great. They now cost at wholesale, \$9.00 for the 5 per cent. and \$6.00 for the 25 per cent., per dozen tubes, or 50 and 75 cents each. The cost, however, will not deter us from using so valuable a preparation. Pyrozone is death to extraneous organic matter, and life to healthy tissue, which it only temporarily irritates while engaging the enemy.

The second preparation, sodium peroxid under the chemical formula Na. O., has been but recently brought to the attention of the profession by Dr. E. C. Kirk, of Philadelphia. In the March number of the Cosmos he gives a history of his experiments, covering a period of two months at the time of writing. He says: "It differs from sodium oxid, just as peroxid does from water, viz.; by its union with an additional atom of oxygen. It closely, if not exactly, resembles hydrogen peroxid in the readiness with which it parts with the extra atom of oxygen; and as is the case in bleaching with hydrogen peroxid, so in the case of sodium peroxid; it is the extra atom of oxygen in this compound which, when liberated, performs the bleaching function by seizing upon the hydrogen of the organic color compound, and so destroying its identity. sodium peroxid differs from hydrogen peroxid in the important particular of its relative amount of available bleaching oxygen, which is stated to be 20 per cent. as against only from three to four per cent. in the ordinary commercial solutions of hydrogen peroxid. As a tooth bleacher and sterilizer of putrescent canals and tubuli, it has an important additional property, which is an advantage over hydrogen peroxid, viz.: its saponifying and solvent action upon the oils, fats and animal tissue which permeates the dental structure, and which so often acts as a formidable barrier to the ingress of the bleaching agents ordinarily used. The most striking illustration of the valuable properties of this compound, is its magical effect upon those cases of foul pulp canal contents, when the entire structure of the dentine is permeated and colored by

a disagreeable and fermenting mass of decomposing organic matter."

My third and last preparation was brought to the attention of the profession in the January number of the Cosmos by Dr. Emil Schreir, This preparation I believe is destined to take the place of Vienna. of all other agents we now know of for treating abscessed teeth and roots, because of its effectiveness and the short time necessary to bring about a cure, the treatment at one sitting being all that is necessary generally, when the tooth and roots can be filled in from three to four days afterwards. I do not know the exact formula of this preparation, but its elements are potassium and sodium in metallic form. It is put up in small vials with a layer of parafine over it, and then corked and sealed with ordinary sealing wax. To use it, a warm needle is pushed through the parafine layer after removing the cork, and a barbed broach inserted; upon withdrawing the broach, a sufficient quantity will adhere to it for conveyance to the pulp canals. It is also a fine bleacher of teeth. Dr. E. C. Kirk says that the preparation is probably a simple alloy of sodium and potassium, and not an amalgam, as preliminary tests have failed to show the presence of mercury. He also says that in his hands practical tests have yielded satisfactory results. It is now for sale by the S. S. White Co. at \$1.75 per bottle or tube. In my hands, extending over a period of about two months, it has proven entirely satisfactory, as have the preparations of pyrozone and the sodium peroxid. I would caution all who essay to use the preparations, to be careful to adjust the rubber dam before applying them. The preparation of Dr. Schreir is highly explosive and inflammable when brought in contact with water, just as metallic potassium decomposes all compounds containing oxygen if brought in contact with them even at ordinary temperatures. To show the action of this remedy (sodium and potassium), if a drop of water is placed upon a glass slab, and a small particle of the compound placed on the water, it will ignite instantly, and then explode.

The liberated hydrogen, together with a small quantity of volatalized metal, is ignited by the heat evolved during the decomposition, and burns with a beautiful lilac flame as the globule floats about upon the surface of the water before explosion. An experiment such as I have described is only necessary to convince any one of the importance of great caution in using it in the mouth. The medicinal pyrozone needs no such precaution in its use, as the mouth can be freely sprayed with it, without any unpleasant effects, but on the contrary is very beneficial.

LABOR BRINGS SUCCESS.*

BY DR. R. H. JONES.

Gentlemen of the North Carolina Dental Society:

In selecting the subject for this essay, it has been my purpose to choose that theme which shall be useful, and that shall stimulate us to greater proficiency in our chosen profession. It is a well recognized fact that to attain that eminence or distinction which brings success, the first prerequisite is thorough preparation. This preparation or education should be as comprehensive as possible, before commencing the study of dentistry proper under a competent preceptor, to be followed by a full course in some reputable dental college.

But this is not all, our education is but commenced at our graduation, then the commencement of our life work truly begins, and the successful professional man is always of necessity a student. It is a duty he owes himself, his profession, and last, but not least, his patrons, to keep abreast with the times. He should avail himself of every opportunity to gain information by reading the best books and journals available.

It is said that law is a jealous mistress, and so it can be truly said of any profession. Should any one select dentistry with the idea that he can make himself proficient without much study and continued application, a few years of practice will be amply sufficient to change his opinion and dispel the illusion.

I am aware of the fact that some skillful and competent dentists never had the advantages of collegiate education, but they would have been more thoroughly prepared had they received such instruction. The exception but proves the rule.

When we remember that in the year 1841 the first degree of dental surgery was conferred by the Baltimore Dental College, we can congratulate ourselves on the rapid strides our profession has made. Yesterday, in its infancy; to-day, taking rank with the oldest professions. Many of its graduates have already attained eminence and distinction in other fields than dentistry.

I need mention only the names of Harris, Arthur, Garretson and Miller to remind us of what has been done by members of our profession; examples which should incite us to noble emulation of their achievements.

Read before the North Carolina State Dental Society, May, 1893.

Without labor there can be no true success. The giant intellect of DeLesseps conceived the building of the Suez canal, but only by persistent labor was that causeway opened to the merchandise of the world.

Professor Miller, of Berlin, by the use of the microscope, combined with oneness of purpose and close and assiduous labor, has raised our theories of dental decay from empyricism to a scientific foundation.

Farrar, after more than twenty years of arduous work, has overcome most of the difficulties of orthodontia.

We need enthusiasm in our work, no half-hearted service can bring success to the votaries who worship at the shrine of dentistry.

It is, perhaps, well for us to be reminded that the pioneers in dentistry labored arduously in accomplishing the grand work of the last half century.

I need not remind you that, individually, each one is the architect of his own fortune, collectively, or as a society, we represent our profession in North Carolina. "In union there is strength."

The founders of this society deserve lasting honor for their unselfish work in giving to the profession and to the people of North Carolina the protection of its dental laws, and thus raising the standard of dental education, and, at the same time, shielding the public from the charlatan and quack. Let it be our life-work and our pleasure to carry forward this good work, and by educating and preparing ourselves "as workmen that need not be ashamed," thus enoble our calling. In order that labor shall bring most success we should labor with some object in view.

Dental societies can exert an incalculable power for good, and therefore should enlist the sympathy and earnest support of the best element in our profession. There should be no jealousies, strife, bickering or political methods tolerated, as they are but the precursors of storms and tempests that destroy the usefulness, if not the life, of the society.

Shall we not keep this society true to the purpose of its founders? and moving forward in the right path, many needed reforms can be accomplished, any necessary legislation enacted, and a higher standard of education raised, that would prevent the entrance of unworthy men into our profession. This society should be the beacon light to which the dentists of the Old North State can look for light and wisdom, and from which should emanate all that tends to elevate us, and thus honor our vocation. Though one of our sweetest poets has sung, "I left the happy fields that smile around

the village of content, and trod with wayward feet the torrid desert of ambition." Yet, I could wish that every young man who desires to enter dentistry, could have engraven on his mind the ambition to excel in some department of his work, not be content to make a living, or to make money by doing poor or medium work. That man who makes the getting of money the supreme object of his life will never excel in anything, except, perhaps, in mere money getting. It is not possible for very many to excel or attain eminence in every department of a profession, but nearly every one can, by systematic effort and close attention to details, make a success in some one thing. It is the continued painstaking, step by step, that brings perfection in character and work, and leads to final success.

In the practice of our art the road to success lies not only in the knowledge of how to deal with each case that presents itself, but how to deal with our patients:

To be gentle and patient with every one, even the most hervous and irritable patient, is a lesson that should be learned by each dentist who would attain success. Patients have long since discovered that thorough and skillful work can be done by gentle hands, and that though ours be a painful calling, we can spare some pains without detriment to our work.

It would, no doubt, conduce to the comfort of our patrons if we could be operated on occasionally, it would bring vividly before us the unnecessary pain we sometimes inflict. Everyone should aim to excel in work rather than engage in competition for low prices, then improvement will come with each operation and quackery, with its attendant evils, will fold its tent and silently steal away. Whatever is worth doing at all is worth doing well; the man who does his work best, other things being equal, is the one who will succeed.

The surest evidence of the quality of one's services is the value he attaches to them, and the public will soon learn to place his estimate on them.

Strive to elevate yourself, to elevate the profession rather than to build up an uncertain, though maybe a temporarily lucrative practice, at the expense of a confiding, though ignorant public.

It is not the effort of the hour that wins success, but patient persistent toil. Difficulties must be met and overcome, and we are stronger for having met them if we have the courage and endurance to pass over them. The sturdy oak is made stronger by the winds that seem to threaten its destruction, but only add strength to its roots.

Shall we not then be prepared for every obstacle that confronts us? not contenting ourselves with present acquirements, but moving forward in the march of progress, endeavor to plant our banners still higher on the fortress of knowledge, and thus not only deserve but command success.

DENTAL EDUCATION.*

BY DR. J. E. FREELAND, BALTIMORE, MD.

.Mr. Previlent and Gentlemen :

I ehter into the discussion of such a subject, as Dental Education, with a marked reging of timidity. Education presents a very wide field for consideration: According to Webster, it "comprehends all that series of instruction and discipline, which is intended to enlighten the understanding, correct the temper, and form the manners and habits of youth, and fit them for usefulness in their future stations."

Thus we heartily applaud the commendable work accomplished by the National Association of Dental Faculties in extending the course of study in dental colleges to a three years, well-graded, professional curriculum. To save myself from the charge of egotism, or the accusation that I know how to teach or conduct dental schools, I frankly admit that I have nothing of important originality to offer, but simply a concurrence of minds much abler to handle these subjects than I.

The proper education, elevation, and dignity of the dental profession must come through the thorough work of the colleges.

When this is well executed they should be endorsed, encouraged and protected by both judicial and dental laws. The rapid birth of dental colleges and their selfish competition for students, soon brought doubt upon the thoroughness of the college work. Then arose the question doubting the proficiency of a holder of a college diploma as a test of fitness for practicing dentistry. Thus it was adjudged by many of our thinking "dignitory" the proper way to remedy this evil was to inaugurate examining boards, and give them full power to ignore all diplomas. This has been done in many States and countries, reducing the reputable diploma from a

^{*}Read before the North Carolina State Dental Society, May, 1893.

good college to the level of the most insignificant. Would it not be a better plan to seek to elevate and improve schools by recognizing their certificates? ("College training is the foundation and key stone of professional fitness.") Another reason for making diplomas stand for something. Some of our most scientific and skilled operators could not pass a strict technical examination as is required of the candidate for graduation of to-day. The necessity of an old practitioner, holding a reputable diploma and passing a rigid examination every time he crosses a State border, would be The subject of dental laws is a deep and broad one. The question whether a diploma from a reputable dental college should exempt the holder from further examination or not, seems to depend upon, which are, and how are we to determine the best colleges of the science of ethology. It seems but just and fair that a man who has spent time, money and study should have a higher standing than that of an artisan who knows nothing of professional training or ethics. Comparatively few understand and fully appreciate the advantages of the dental profession, as represented by some of the public men of our country.

Porter, for instance, the "great" census enumerator, presumingly an educated man, and one who should be acquainted with the strides of every vocation, has (unwittingly) classed dentists as mechanics. Now, gentlemen, who is to blame for these impressions? Do we impress our patients at our offices and in their homes with the one idea, the only subject with which we are acquainted is dentistry, a species of mechanics, merely filling a cavity in a tooth? No! No! Professional gentlemen are supposed to be educated, cultured and refined. Are we, as a class and profession, considered as much as we should be? I not only deem it necessary for all who intend to practice the profession of dentistry, to be thoroughly cognizant in what directly pertains to it, but they must be educated.

No profession of to-day requires a broader or more varied education for its successful practice than dentistry. That the dentist may attain renown among his fellow men and elevate the profession, it is necessary that he should possess a diversity of acquirements and it is indispensable that he be excellent in many. The popular dentist of to-day is compelled to be a courteous gentleman at all times and places, a mechanic, an inventor, an investigator, a student, a logician, an observer of social affairs, sympathetic, honest, long-suffering, firm and patient in the execution of his duties and treatment of the various classes of human nature.

There is another attribute that should belong to the model dentist, and that is his ability of being both doctor and teacher. Teacher is designated, "One who instructs and educates others."

One of the noblest works of man is the alleviation of ignorance and suffering, whether physical or mental.

The first idea, then, that should induce pursuance of this subject is the improvement of our fellow men. To teach the masses will do more to exterminate the "Cheap John," the "shop," than all the legislation in the world.

How, when and where shall these subjects be taught?

To the home influence and public schools we must look for the education and preservation of our country and profession, with the introduction of certain studies into the public schools of our State and country, bringing into prominence the general knowledge of prophylactic measures and professional expedients, in the care of the teeth, as well as in the anatomical, physiological and pathological conditions, most commonly the result of general carelessness and neglect. To that honorable body, the North Carolina Teachers Assembly and Normal Schools, we would specially ask an introduction of these fundamental principles.

The proper instructions would supply knowledge of lasting benefit, the importance of which the public does not realize, through almost total ignorance of the conditions and results which prevail not only in the mouth but the entire body.

Professor Miller has given evidence in his recent paper on the Human Mouth as a Focus of Infections in which he shows proof that no less than thirty-eight different infections may be traced with more or less directness to the human mouth as a facial or initial point, to say nothing about various diseases brought about by decomposing animal, vegetable and mineral matter being in the mouth. We would ask: How many mothers understand why the seeming premature loss of their teeth, their lime salts, etc., in connection with fætal life? How many parents know the eruption of children's teeth, the absolute care of the six year molar, why its early decay, etc.? And still the question may arise in some minds as to the legality of a prescription bearing the initials D. D. S. answer to which, I would say it is our province to combat all diseases of the oral cavity and any deviation from the normal is surely a disease, and all diseases being subject to the laws of medicine is surely within the sphere of the competent dentist.

What would be your reward in treating a case of facial neuralgia aggravated by congested pulps in an anemic female, whose bowels

or uterus were engorged with matter that long since should have been expelled? Would local treatment cure the disease? Would it be asked by any if this patient must be sent to a physician for a cathartic because the dentist has not been sufficiently educated to give the patient relief?

Again, a patient presents himself whose hereditary tendencies show rheumatic diathesis. Pain has located itself in the teeth. Must we extract, or shall we apply palliatives in order that we may have another visit and another one of those bright circulars with a woman's head on one side of it, or shall we, with true honesty, diagnose the case properly and prepare to combat it with conscientious skill?

I do not wish to say that the dentists must unsurp the rights of the family physician. I only desire to mention that he should prepare himself by proper education to be subservient to none, so that when emergencies arise his qualifications and independence will be manifested.

Thus, you see, "the missing link" has been found. A new branch has been found to an old science. An offspring of the same family has been born. Dental Science.

It is not a wild flower found growing without cultivation; but by grafting and ingrafting a new and beautiful flower has been produced, only differing from the older branches of medicine in the cultivation it has received, and now that we have this new flower to cultivate, we want and must have a greater number of intelligent men—men who win from literary colleges the degree of B. A., M. A. and LL. D. Why are our ranks sometimes filled by men whose general training has been, as a rule, more or less indifferent?

To rectify this and elevate the standard of our honored profession, it would be well to discourage all seemingly unfit candidates aspiring to the title of D. D. S., and require good qualifications of literary attainments.

To require at least twelve months pupillage under a reputable practitioner. This preliminary training of the student has caused much comment.

I do not refer to that privilege of which consists in cleaning cuspadors, running errands and being locked in the laboratory. If the preceptor has been properly taught by a universal system of teaching dentistry, he will naturally impart the same to his student.

Let the colleges stop kicking and there be inaugurated a universal and systematic way of teaching the profession. This, combined with the proper effort manifested by every member of the

dental profession devoted to the bringing up of the rising generation to a full knowledge of their dental conditions, will result in more appreciative patients, better dentists and an elevation of the profession's standard. In conclusion, let me say a word in reference to fees:

All works of taste, art and dentistry must bear a price in proportion to the skill, time, expense and education attending their requirements.

"Things so called dear are, when justly estimated, the cheapest."
Beautiful arts and operations are not made by accident, nor can they be made at small expense.

A competition for cheapness and not for excellence of workmanship is the most frequent and certain cause of rapid decay and the entire destruction of all professions.

DULL or improper instruments are cause for complaint. The idea of some that it will be taken as evidence of skill to have but few instruments, and the boast that "I can use anything," is nonsense; the more skillful the dentist, the keener, brighter and more delicate, varied and appropriate will be his instruments.

A BROKEN plate which chanced to fall into our hands to be mended revealed to us an idea in plate work. Where a tooth on a gum section happens to get cracked off without serious injury to the section, it can easily be mended without removing the whole block by grinding the remaining portion of the tooth off down to the gum line and inserting and vulcanizing a plain tooth of proper shade into the gap. When carefully done the break can hardly be detected. We give credit to Dr. Reynolds of Marietta, Ga., for the idea.

DR. C. EDMUND KELLS, in an article in June Cosmos on "Management of Dental Practice," gives much good advice. Among other things he says: "If there is one point that I would endeavor to impress upon your mind, it is the necessity of being found always at your office during your regular hours. During the early years of your practice the probabilities are that your time will not be always filled by patients, and sometimes there will be a great temptation to run out for a little while. But this should never be done, except in absolutely unavoidable instances."

NORTH CAROLINA STATE DENTAL SOCIETY.

RALEIGH, N. C., May 23, 1893.

The Society was called to order at 10:30 A. M. by Dr. F. S. Harris, President. The meeting was opened with prayer by Rev. M. M. Marshall, D. D., Rector of Christ Church.

Dr. Turner: I believe it has been customary upon these occasions to inaugurate ceremonies incident to the opening of the sessions of the Society by an address of welcome and a response. As chairman of the Executive Committee, and as a member of the local Society here, we decided that it was hardly necessary to consume your valuable time with these formalities. We simply want to say to you that it is a source of great pleasure to us to have you gentlemen with us—men who belong to the school of advanced practitioners. It gives great encouragement and is a great benefit to us to have your aid in our efforts to advance the cause of science, and we simply say to you, one and all, we give you a hearty welcome.

The President: On behalf of the Society, I thank Dr. Turner for his remaks, and we will have no formalities besides those presented. We are glad to have had him make those remarks on behalf of the Society and the dentists.

The President stated that the next thing in order was the call of the roll.

The roll was called by the Secretary, Dr. J. E. Wyche.

Dr. V. E. Turner requested all applicants for license to present their names to the Secretary.

The minutes of the last meeting were read by the Secretary and adopted.

Dr. A. H. Dreher, of Mount Pleasant; Dr. J. J. Battle, of Rocky Mount; Dr. J. R. Osborne, of Shelby and Dr. Norwood G. Carroll, of Raleigh, on recommendation of the Executive Committee, and upon separate ballots being taken each was unanimously elected to membership.

The President then read the annual address which was received with applause.

Dr. Everitt: I have listened to the address with great pleasure, and I move that it be referred to a committee of five to consider the suggestions made in the paper.

The following committee was appointed: Drs. Everitt, Carr, Hunter, Herring and Mathews.

REPORTS OF STANDING COMMITTEES.

Dental education being called, Dr. Freeland, Chairman, being in Baltimore, sent a paper which upon approval was read by Dr. I. N. Carr. (See page 402, this issue.)

Dr. V. E. Turner: Before the reading of the next paper on dental education, I would like to say that there is a distinguished gentleman in our presence, who is not only a representative of the Virginia dentists, a representative Virginia gentleman, but the president of the Virginia Dental Society. He is already an honorary member of our society, and, consequently, entitled to the floor; but frequently that matter is not thoroughly understood, and therefore I take great pleasure in presenting to you Dr. E. P. Beadles, of Danville, Va.

Dr. Beadles: It certainly gives me great pleasure to be with you. I have met with the association before and know what a meeting of the North Carolina Dental Association means. I was impressed at Greensboro with the good looks of the members of this association, and not only with their good looks but with their good sense. I do not know when I have attended a meeting that gave me more pleasure than the one I attended at Greensboro. I went back and reported to the Virginia dentists that I had received more good from that meeting than from any other one meeting I attended, the large meeting of the Southern not excepted. I stand here, as Dr. Turner said, to represent the Virginia Association. If I do not see each one individually, I give you all a cordial invitation to be with us at Charlottesville on the 8th of August.

Dr. Paul Moore then read a paper on Dental Education.

The President: Gentlemen, the paper is before you, we will be glad to hear remarks from any gentleman upon the subject.

Dr. Turner: I cannot let this moment pass without expressing gratification at the manner in which the subject has been dealt with by Dr. Moore. I am sure that any paper written upon Dental Education is a step in the right direction. I feel that he takes a view of Dental Surgery not usually taken by this body, and I think on the whole the paper is a good one. I would like to say about this matter of students, that I remember on one occasion a young man came to me for license and we were discussing the subject. He said that if he knew how a thing was done he could do it. I said, my friend, you were never more mistaken in your life; that is the rock upon which most people split. It is not the man who knows what is to be done and how to do it that can always do it best; on

the contrary, very few can do it well. The expert operators in this country are those who have learned how to perform well those operations, and not the men who have learned the theory and literature upon the subject. This brings me back to the question of students.

It is necessary for a man to prepare himself in infirmary practice in the colleges. It is necessary that he should train his fingers to handle the instruments expertly rather than to go to college without any pupilage or instruction in the use of instruments. We all know that these colleges are crowded with students and that a larger number are taken than they can accommodate. We know that in these colleges their turn comes very seldom, sometimes only once a week, and that taking the average length of time in college the student does not have enough experience in the manipulation of instruments to prepare him for practice in dental surgery. There is no other place to get this experience than in a dental office. say it is a mistake to read a few books, rush off to college and come back to practice dentistry at once, and now that the three years term has been adopted I am satisfied that the students, with one additional winter, would really have a longer term in the infirmary. But heretofore it has been a growing evil that these gentlemen who have come out well posted as to the theory in almost every branch, when you put them to the chair are often wanting in practical knowledge of dentistry. I have heard men give the details of the most beautiful operations in the world, but when they come to put them in practice they cannot do it. You must know how to manipulate properly. If he has never been accustomed to handle the instruments he has got to get accustomed to control the muscles of his hand to be accurate and to familiarize himself with the work before him.

Chairman: Any further remarks?

Dr. E. L. Hunter: I think, Mr. President, that the remarks of Dr. Moore are not as clear on some points as he intended them to be. A practical fact is to theory what practical experience is to good operation. There is no way to get rid of a practical fact. All the theories in the world cannot dispense with it, nor can dentistry dispense with practical experience. This is obtained in two ways: First, by the student after he has graduated; second, by his experience in a dental office, which I believe our Society requires shall be of two years' duration.

Dr. Turner: I am glad to hear the gentleman refer to a clause in our by-laws. I beg to differ with him in regard to that matter, for at present the colleges require a three years' course, that is, three

winter courses, before you can come forward for graduation. Now it strikes me that when we passed this by-law only two years were required. It strikes me that a man might be allowed to spend a part of that two years' pupilage in attending his first course in college for the reason that it would take five years to get into practice, according to the present laws of this Society and the rules of the colleges. It strikes me that this law might be amended with propriety. I do not think the student ought to be required to study five years before he can come forward for his diploma.

Subject passed until other members of the committee should arrive.

The President: The next subject is Dental Chemistry and Metallurgy; the Chairman of that committee is Dr. I. N. Carr.

Dr. Carr: In making my report for that committee I would like to say that I corresponded with every member of the committee and failed to get a response from any of them except Dr. Banner. He is here but informs me he has no paper. In order that this section may not go by without something being said, I have two or three pages which I shall read. (See page 396 this issue.)

Dr. Carr read his paper on Dental Chemistry and Metallurgy.

The President: The subject is now open for remarks.

Dr. Carr: I would like to hear from Dr. Harper.

Dr. Harper: My experience, Mr. President, with pyrozone is quite limited, and only as a victim. Dr. Carr, this morning, while exhibiting to a few others, was in search of a patient and I occupied that position. He sprayed my gums with it, I did not know there was any disease in my gums, and do not yet, but the saliva produced by that spray would indicate that there was pus somewhere. There was no unpleasant effect whatever in the mouth—that was a three per cent. solution. I cannot say the taste was unpleasant. The subject of catarrh came up in connection with it, and having had some trouble in that line, Dr. Carr suggested that it was good for catarrh and to prove that it was, he took some in a vial, poured it into the nostril and let it run through. I think from the quantity of pus generated it searched very closely for it and the discharge has not entirely ceased yet; my experience as a victim convinces me of the power of the remedy as a searcher of pus and pus destroyer. I will mention a case I had a day or so ago in which I used peroxid of hydrogen. There had been an abscess on the right superior lateral for a good while. Pus had been discharged through the cavity, but when the lady came to my office the cavity was closed up and very pain-I removed the debris and cleaned out the cavity as thoroughly

as I could, then made an application of peroxid of hydrogen and concluded that there would be no discharge—that there was no pus there. I then proceeded to fill the large cavity in the centre and when that filling was nearly completed, suddenly water and pus poured out and flooded my filling. There was sufficient force generated to force the cotton from the place where it was placed. I ceased work for a few minutes and I suppose at least a teaspoonful of pus came from that cavity through the tooth and it did not cease for an hour. After a good deal of experience I am convinced that peroxid of hydrogen is valuable in the treatment of these cases.

Dr. Carr: I would like to ask one question of the Society. Dr. Kirk is to be here we hope, and I would respectfully ask that this subject be not passed because he is recognized as one of the ablest men in our profession in this country and we would like to see him handle this subject.

Subject informally passed.

The President: The next subject in order is Dental Pathology—Dr. Durham, chairman, absent.

Dr. James: I regret exceedingly to say that I have no paper and I think it a shame that this subject should be passed over with no paper and no member responding, and I must admit that I am ashamed of myself that I have none. I have been a member of this Association nine years and have never written a paper. I have always felt that I should be taught and not come as a teacher.

Dr. Beadles: That gentleman says that he comes to be taught. Let me suggest one thing; he cannot learn better than by writing a paper himself. My experience has been that the papers I have written have done me more good than the people who heard them. Subject informally passed over.

The President: The next subject, Dental Therapeutics, Dr. Hilliard, chairman. The chairman asked for further time. Granted. On motion the meeting adjourned.

AFTERNOON SESSION.

The meeting was called to order by the President at 3:30 P. M. Operative Dentistry called. No response. Passed for the present. Prosthetic Dentistry called:

Dr. Crawford: Here is a model of a case of irregularities, and I would like to get the views of the brethren as to how it should be corrected.

Dr. Carr: I would suggest that every member who has looked at the model exhibited by Dr. Crawford let us know what they think about the case.

Dr. Harper: It strikes me that the suggestions of Dr. Hunter are good in that case. I happened to be present with Dr. Crawford when the patient came in for the Doctor to see whether or not the articulations of the models were accurate, and we saw that they were as nearly so as could be obtained. My own experience in regulating, especially with young subjects like that, is that nature helps us very much when started in the right direction, and by the removal of the second and sometimes the first bicuspid, with gentle pressure, sometimes without any appliances whatever, in one or two years you will be astonished to see what nature, with very little help, has done, and I think that could be helped very much. know of a case of a boy about thirteen years old that was quite similar to this except that there was not the contraction in the lower jaw that there is in this. Both the upper second bicuspids were extracted in that case, and in the lower, one second bicuspid and one canine, and without any appliance whatever, by a judicious pressure of the fingers, in one year any one seeing the model that was made just before the teeth were extracted and seeing the mouth now would hardly recognize it.

Dr. Herring: I think the suggestion Dr. Hunter has made is a very wise one. It is true that in a large majority of cases when we take out teeth and assist nature and remove obstructions, nature has a peculiar manner of her own of producing a certain type, and whenever obstructions are removed, she generally tends to that end, but in a case of that kind it is impossible. I would suggest this: To make a rubber plate to extend round back of the teeth and cement a hook near the spine of the arch to separate the teeth, place a panel on outside of protruded teeth, solder a shank, letting this stem of the T pass between the centrals. Then with a rubber band attach this to the hook in the plate. You have gradual pressure, an appliance which can be easily removed and replaced by the patient.

Dr. Jones was introduced and read the annual essay, entitled "Labor Brings Success." (See page 399 this issue.)

The President complimented Dr. Jones on his admirable paper. Dr. Harper: Mr. President, it seems to me that such a paper as that should not pass without some expression of opinion and commendation. The lessons, therein applied, utilized in our practice, would be worth a great deal to us and worth more to our patrons.

There are a number of thoughts there that most of us, I for one, need to apply to ourselves, and that is one of the benefits that I have ever derived from attendance upon the State meetings—these reminders of the short-comings that sometimes we are tempted to allow in our practice. The perfection of labor, though it take all day to make one filling perfectly, that day should be spent in making that filling, and if it takes us many an hour burning the midnight oil to keep abreast of the times after the arduous day's toil, that oil should be burnt and we should prepare ourselves to meet the emergencies as they arise, and after we have thus prepared ourselves, we should not be ashamed to say to our patrons, "this work requires and demands a fair price and you must pay it."

The President: On my own behalf I would like to express my thanks to the essayist, and I think I express the feeling of the Society. Personally I have felt benefited by it.

Dr. Everitt: I desire to express my gratification at listening to the splendid paper of Dr. Jones. After listening to his paper at our meeting last year, I felt that the least I could do would be to put him in nomination for this occasion, and I am glad to say he has come up to my full expectations. It is one of the best papers I have heard in many years.

The President: The next subject is Oral Surgery. Dr. Hoffman, Chairman of Committee. No member present.

Dr. Beadles: Allow me to ask a question here, one in which I have been interested for the last year or two, that is, necrosis of the jaw, and I would like to know if any member present has had any case of this kind lately, and if so, what was his method of treatment? I had a case some time ago, and if the Society feels any interest in it, I will give a description of it later on. I also had a case of what I supposed to be osteo sarcoma. I should like to hear from members of the Society upon that point also.

Dr. Spurgeon: I have had one case very much like the one of Dr. Beadles, but I would not like to claim the case as the gentleman is dead. A synopsis of it, however, may be of interest. We diagnosed it as fast developing osteo sarcoma, and only decided to operate to give the patient some relief. The development seemed to begin on the right side of his jaw, and when we saw the case it had grown to such an extent that the mouth could not be closed and was painful, so that it was only temporary relief we expected to get. We took out the superior maxilary bone, exposing the ethmoil part of the tumor which was taken away and it was dressed. The patient lived some eight months after more comfortably than before, so while the

operation may be considered a success owing to the benefit derived, it was not on the whole a success. I have seen a paper of one of the members, which, while it does not go into this subject especially, seems to me to bear upon it. It is prepared by Dr. Rominger, and I think it would be appropriate to have it read as we have no paper on the subject, and this bears upon it.

Dr. Rominger read a paper which he humorously designated as a "Brunswick Stew."

Dr. Beadles: I think I have gotten what I asked for. I do not see that there is anything for me to say. I was alluding to a case of my partner and myself which we treated as necrosis of the lower jaw. I hear no case described just like it, but at the same time I have been profited by what has been said. This was a case of a gentleman who came to us from a distant State. He had been consulting a number of surgeons and dentists about it. It was a clear case of necrosis of the lower jaw extending back to the third molar and from the canine. He was anxious to have some treatment. All the surgeons said that in order to save his life the bone would have to be taken away. He had some heart trouble and he desired treatment otherwise than by chloroform. This necrosis came about from the failure to extract three molars and the inflammation resulted in necrosis. The method by which we proceeded was simply to take away these teeth and expose the necrosed part, the necrosis extended that far back. We depended entirely on peroxid of hydrogen and aromatic sulphuric acid, thoroughly cleansing it. When he first came he could scarcely get up the steps. The peroxid acted Then we would inject aromatic sulphuric acid, and in a few instances would touch the bone itself with the sulphuric acid. The bone came away in small pieces, and we took some twenty or more pieces of the bone out in all. In about three months from the time I first saw the case he was well. The second case was very much like the case Dr. Horton mentioned. A physician brought him to me from the neighboring county, and as soon as I saw the case I was satisfied very little could be done. sultation with his family physician we called in another physician, and after consultation we decided if there was any chance to save him it would be by an operation. The home for the sick was not ready for patients at that time. The second physician thought we had better wait until the home was ready. I suspected his idea was the same as mine on that point, that before the home for the sick would be ready the patient would be somewhere else. He died soon after. I am at a loss to know what could have been done for

that man, and doubt if any operation would have saved him. His face on the outside was like the case I described just now.

Dr. Jones: I had some experience five years ago with a case in the line of the one of which Dr. Beadles was speaking. The patient presented himself with the right superior lateral incison diseased. By his neglect necrosis had followed and it was a question with me whether that tooth could be saved. I made an opening and thoroughly treated the tooth. That did not make a sure cure of it. I then made an opening from the outside through the alveolar process and treated it with aromatic sulphuric acid, and I assure you in a few days you could see the improvement and it was not long before the abscess was entirely cured. I saw the gentleman some years afterwards and the tooth was doing good service; no return of the disease. A considerable portion of the alveolar process came away.

Dr. Horton: Not long ago I had a case—a man weighing about two hundred pounds and seemingly in perfect health. He said he thought it was tartar on his molars. I examined and found necrosed bone. The teeth were in perfect condition. I removed the necrosed bone, and in talking to the man asked him if he had had any trouble. He knew what I was alluding to at once, and said, "Yes, eleven years ago I had syphilis." I merely mention this as it is often necessary to ask a patient in a professional manner so that he cannot take offense at questions of this character.

Dr. Rominger: I want to call attention to two principles which apply not to one case alone but to all cases of a similar character. One point was referred to in the paper with referenc to catarrh. We know that is a very common dise ase and one which most physicians regard as incurable, to a great extent at least. I want to call the attention of the profession to nodules on the septum of the nose. You will be surprised to see often one nasal passage partially or completely closed up by a spur of cartilagenous tissue. It is a wonder what a benefit accrues to the patient when this is taken away. The least obstruction will close up the air passages and people are compelled to breathe through the mouth instead of the nose, and mouth breathing causes sore throat and gives considerable trouble that way. Many persons have a roaring of the ears and loss of hearing, the result of breathing through the mouth. I remember one case I treated in which the patient could hear a watch tick only two feet from the ear on one side, and fifteen feet on the other. After these spurs were taken out the hearing was restored to its normal condition.

Another principle I want to call your attention to, especially the younger members, is to look for the reflex point, or the response of the terminal nerves. The patient will come into the office complaining of a certain tooth aching; you examine that tooth, and find it sound; you direct your attention to a tooth in the opposite jaw, and on tapping around you find a response at once. You will find the tooth complained of sound; but direct your attention to its complement and you will find the cause of the ache.

In cases of severe facial neuralgia, when you have examined the teeth and are convinced from the diagnosis that the trouble does not arise from the teeth, look to the terminal nerve and nine times out of ten you will find the cause. In the case of females during gestation, complaining of neuralgia and aching of the teeth, this fact should be taken into consideration. We know that when children or other persons have worms they scratch their noses. person with hemorrhoids is just as apt to have neuralgia as to have trouble where the real disease is. I call attention to this because, during the period of gestation there is pressure upon the lower terminal nerves. During that period if there is a lack of phosphate material in the food of the person (a great deal of this material being required for the growth of the fœtus,) the phosphates will be taken from the teeth. It is our business as scientific men to instruct our patients along this line—that proper food, such as oatmeal, Graham bread, etc., be eaten during periods of gestation. mother who is fed that way will have but little trouble with her teeth at such times. Take, for instance, the case referred to in my paper. It was the most severe case of facial neuralgia I ever saw, and the lady then was in gestation. With the assistance of the family physician, I examined the urine and found that in a test tube about the size of my little finger one-fourth was solid albumen. She had suffered for weeks. A few days treatment relieved her.

Dr. Wyche: Some years ago I filled a bicuspid, in which the nerve was very nearly exposed, with cement, and in the course of two or three years the nerve died and the tooth abscessed and a small tumor commenced on the gum, which finally involved the bone and necrosis set in. A part of the superior maxillary bone had to be removed. The patient lived in another State and never came back to have it looked after, treating it as only a trivial matter. But these things sometimes, if allowed to run on, will result very seriously and the patient may die from septicemia or pyemia. We should always caution our patients not to let these things run on, but to have them attended to as soon as any trouble appears.

Dr. E. L. Hunter: The subject is so well worn I do not feel like discussing it. Some time ago I was present at two successive operations on the same patient, in the removal of a tumor. In the first operation the tissue was removed thoroughly and the bone scraped. In the course of six or eight months the tumor came back again. At the second operation an opening was made in the jaw and one side of the jaw-bone taken out, and the entire tumor taken out with it. It was said to be a cancer. The patient died. The case was considered by us at first as epithelioma. It turned out to be malignant cancer. Another case—a negro woman. On examination I found a tumor behind the tooth to be extracted about the size of a walnut. I extracted the tooth and split the tumor open almost to the skin, cut it crosswise and almost dissected it into hash, and into that I ground chloride of zinc. Two applications dissipated it entirely. I do not know what it was but believe it was epithelioma.

Dr. James: I have had several cases of necrosis. I find that such cases generally are the result of syphilis or mercurial treatment for that disease.

Dr. Crawford: I have never treated a case more than ten or fifteen days, and some of them had been running ten or more years. I use salicylic acid. I have never had a case I could not cure in fifteen days.

Meeting adjourned.

When we again greet the readers of The Journal, the World's Dental Congress will be a thing of the past. We have talked and written about it and tried to impress upon every one within our reach the importance of attending this meeting, and if any fail to go they can only blame themselves hereafter. As Dr. Truman says, "it would seem almost a waste of energy to urge the duty resting upon every dentist to make the sacrifice of time and money to be present. The Congress promises to be the one event in professional life, and with the unequaled attraction of the Exhibition added, it should prove the most powerful educational and social stimulant that dentistry has witnessed or is likely to experience in many generations."

DR. JOHN B. HAMILTON, of Chicago, has been elected editor of the *Journal of the American Medical Association*. He has been editor of the *Journal* before, and a trustee of the same for several years. Dr. Culberson, the former editor, will return to Cincinnati.

GEORGIA STATE DENTAL SOCIETY.

TWENTY-FIFTH ANNUAL MEETING.

(CONTINUED FROM JULY NUMBER.)

THIRD DAY-MORNING SESSION.

Vice-President Williams in the Chair.

Dr. W. G. Browne gave a talk on the method of stamping crowns with the Morrison outfit.

Dr. C. V. Rosser, Chairman, reported as follows for the Executive Committee: We have examined the accounts and books of the Treasurer and found them correct and neatly kept. Cash on hand, \$134.81.

On motion, Dr. S. W. Foster, of Decatur, Ala., was elected an honorary member of the Society. Dr. Foster acknowledged the honor in brief but eloquent and appropriate words.

Dr. W. W. Dennis, of Eatonton, was elected to membership.

A telegram addressed to the Society, through the Secretary, from Dr. W. H. Burr, Madison, Ga., was read, expressing his regrets at not being able to accept the invitation extended him.

Dr. Burr was one of the organizers of the Society, and the first President, 1869.

Dr. B. H. Catching then read the following paper:

Dr. B. H. Catching on the Persistent Effect of Medicines Confined over the Dental Pulp.

It is with some trepidation that I put these remarks in writing, as it is difficult sometimes to make ideas clear in print.

There is a necessity for calling a halt in the practice of confining medicines over a dental pulp. The practice of medicine in any department is more or less impirical. If there are exceptions it is in the practice of general or special surgery where cause and effect are more easily determined, more because of the local and specific nature of the cases and treatment.

It is a common practice when a tooth is presented with a pulp not quite or even fully exposed, of laying over the floor of the cavity a covering of medicated substance, the medicament usually being carbolic acid, creosote, one of the essential oils, or a mixture of oxide of zinc and one of the above mentioned. Sometimes the cavity is simply wiped out with one of the named preparations and the filling immediately inserted.

Even this practice is wrong if there is diseased dentine, much or little left for pulp protection. I fear I may get off on pulp capping, which is not the purpose of this little paper, but which is closely associated with the method in question.

We will suppose the cavity ready for filling, it having been determined to leave a layer of diseased dentine over the pulp. With an idea, not seemingly well defined or understood, the operator dips a piece of cotton in creosote, places it in the cavity, and thoroughly saturates the layer of dentine, removes the cotton, wipes out the surplus creosote and proceeds to introduce the filling. Or, it may be, that a substance of some kind is soaked with the medicament and laid on the floor of the cavity and the filling put in over it.

Now you get my idea, and this is the practice I wish to condemn. The operator's idea is evidently to guard against pulp trouble in the future, while it is the very thing he is courting. these substances is penetrative, some more and others less volatile, and all are irritants when confined. The strata of dentine is penetrated and the pulp surface is reached. There is no chance for the medicament to volatilize or to become inert except by passing through the tooth; and to expect a pulp to take it up and carry it off is certainly expecting too much of this dental organ. Hence, there comes a struggle for life in the very organ sought to be pre-The period and mastery of this struggle is determined by the quantity and irritating quality of the medicament used, and the vitality of the pulp and the constitutionality of the patient, if I may use the word.

Illustrate somewhat by putting a drop of oil of cloves on your handkerchief and see how long it will remain. Even a washing or two will be required to destroy it, coupled with the airing and handling it will receive.

I verily believe if I were confined in a room in which a large sponge saturated with creosote was placed, I should die surely in a week. This, you may say, is my idiosyncrasy. Let that be; I could not stand the odor. Surely such a practice is not a correct one. A few days since a case of incipient pericementitis was presented. On removing a filling in the tooth, put there by a competent dentist four or five years ago, the odor of creosote was strongly detected, and of course a dead pulp was found. This was in the mouth of a stout, strong man, in whose tooth the battle for the mastery must have been strongly fought, but with the usual result, the medicament the destroyer.

When it is necessary to leave diseased dentine in the bottom of a cavity it is better to syringe it thoroughly with as hot water as the patient can bear, dry out with an absorbent and wash it with bichloride of mercury—a weak solution—then thoroughly dry it with hot air, coat it with varnish and fill over it.

Dr. Browne said he was glad this subject had been brought forward as it shows study and investigation. He thought, however, that the practice condemned by Dr. Catching is the best that can be done in the conditions described and that the effect produced is greatly exaggerated by Dr. Catching. If there is that liability, however, something can be interposed to prevent that action. Asbestos would do very well, but, after all, he thought the best thing to do was to destroy the pulp and fill the root canals. It has to be done eventually, and may as well be done first as last, and save the intervening trouble.

Dr. H. H. Johnson: I take issue with the essayist. I do not believe such applications cause the death of the pulp in the majority of cases. Where diseased dentine is left as a capping to prevent exposure, (which is good practice) the death of the pulp will often ensue, it matters not how the cavity may be treated. In cavities of decay, even where there is a considerable layer of hard dentine left over the pulp, upon investigation it will be found that this layer has been affected clear through, extending quite to the pulp chamber. I think this diseased dentine in contact with that portion of the pulp, has, to a certain extent, set up a pathological condition in that organ which, in many cases, will ultimately result in its death, and very often without pain or inconvenience to the patient.

Dr. W. H. Morgan: As to the use of escharotics in a tooth cavity I have very clear-cut views. I long ago formed an opinion in regard to the removal of softened dentine. In an old work which I read in 1846 or 1847, and which I recently looked through, I found some marginal notes made at that time. I found an extract from an early number of the American Journal of Dental Science, on this subject, by Dr. W. H. Dwinelle, in which he advocated leaving a portion of the softened dentine in the bottom of a deep cavity to avoid exposing the pulp. In a little note I said: "I approve of this method in case of deep seated caries, and propose to follow this line of treatment." Dr. Dwinelle, later on, partially retracted and confined himself to leaving dentine which was diseased, but not that which had softened, that is, from which the lime salts had been dissolved out. But I held on to the original idea. My observation through these many years has led me to believe that if even this softened

dentine is thoroughly dried out before the filling is inserted there will be no more decay. There can be no further disintegration without moisture. We used to say we used disinfectants, but it is an antiseptic we want—perhaps creosote or an essential oil, removing all surplus.

I am surprised at two statements made in the paper. One is that in such cases creosote, carbolic acid, etc., should be rejected because we may get after-effects-because they continue to exert their influence on the contents of the tubuli; and yet it in the same breath he recommends the use of the most active and most persistent agent-corrosive sublimate; bichloride of mercury, the most efficient antiseptic known, which does not coagulate, but expands when It is true that if an excess of carbolic acid is left, that which is not combined in the coagulum may reach the pulp and do harm, but enough for that should not be left. I have been severely criticised because I advocate the formation of a coagulum to prevent the continuance of decay, and the decomposition of the semifluid contents of the tubuli. But the coagulum stops up the tubuli. and a coagulum is the very slowest of all animal tissues to decom-I prefer those antiseptics that do coagulate. I am afraid of bichloride of mercury. I do not know it limits, but if it penetrates to vital tissue, it will destroy.

Dr. Morgan also liked a combination creosote and iodine. The iodine would penetrate, even hardened dentine, and stop up the tubuli. Would not use a large quantity of anything.

Dr. Catching, in reply to Dr. Morgan, said that he was sorry that the latter had not heard all of his paper, as was evident from his remarks. He did not advocate leaving bichloride of mercury in the cavity. He advocates cleanliness and dryness; there was a material difference between wiping out a cavity and putting in a layer of something and sealing it in. He wants dryness and cleanliness.

Dr. S. W. Foster said he was of the same opinion as Dr. Johnson, that the original disease, which penetrated to the pulp chamber, affected the pulp and causes its death. He wished to ask Dr. Morgan what causes the death of the pulp when decay has ceased under the filling.

Dr. Morgan: It is caused by pressure of the filling, which proves a source of irritation. When you shut out moisture you arrest the progress of decay, but if the pulp was already seriously diseased, then the mere irritation of the operation of filling in itself may set up a chronic inflammation, causing congestion of the pulp, from the

thickening of the membrane around the pulp arresting circulation and causing its death. It never dies unless there is such a degree of inflammation as to cut off the circulation.

Strangulation cuts it off, and we have decomposition, but there is no pus unless it comes from the outside. Suppuration is a physiological process, and never occurs in dead bodies—they decompose, but there is no pus.

Dr. H. H. Johnson said he had a matter of great importance to introduce for the consideration of the Society in the form of a resolution, and believed that if the object of the resolution was accomplished, a vast deal of good would be done toward the relief and comfort of a suffering class of humanity.

Dr. Johnson then offered the following resolution:

WHEREAS, That as there are about two thousand, more or less, inmates of the Georgia Lunatic Asylum, shut up from the outside world without the possibility of obtaining proper dental services, and

WHEREAS, That inasmuch as the affections of the teeth, as well as coherent diseases, wear on the nervous system, producing irritation that is decidedly detrimental to the comfort, welfare or recovery of the patients; therefore be it

Resolved, That it is the sense of the Georgia State Dental Society, that the appointment of a Dental Surgeon to the Georgia Lunatic Asylum for the relief and comfort of the helpless inmates, and the preservation of their teeth, would be a humane and Christain act, and that this Society urgently recommends the same.

Resolved further, That the President be empowered to appoint a committee of five, to confer with the Trustees of the Asylum and urge them to recommend the appropriation to the Legislature, and if obtained to make such appointment. That the Secretary be requested to furnish a copy of this resolution, and the discussions thereon, to each of the Trustees.

Dr. C. N. Rosser: I do not know that I had given this matter any thought until since it has been mentioned to me by Dr. Johnson. Dentistry has accomplished a great deal; it has advanced rapidly to the front. But if we succeed in accomplishing the ends proposed by this resolution, we shall have done more in this one stride for the benefit of our fellow-beings than could be accomplished by any other means in a lifetime. I can conceive of no brighter star in the crown of the hereafter, than the one to be worn by the instigator of this movement. It is well known that the agonies suffered, which we alone can relieve, are a great aggravation to the nervous condition of the inmates of the lunatic asylum.

I think that as members of this Association, we should do all in our power to secure the accomplishment of this noble object.

Prof. W. H. Morgan, Nashville: I hope this resolution will be adopted without a dissenting voice. In years past I had considerable practice among the inmates of the Central Asylum of Tennessee, and my attention was drawn to the special condition of the teeth in connection with insanity. Considered as a disease of the nervous system, there is much that is not understood about what is termed reflex nervous action. It is only occasionally that we stumble upon the location of the lesion, which occasions it. The nerve of a tooth is a ganglion, and frequent source of reflex nervous action, as seen in infancy, when the deciduous teeth are making their appearance. From our inability to control this action, is due the large proportion of infantile mortality during the second summer.

We may have reflex nervous action from the teeth at any age. This reflex action is frequently exerted on the brain as the result of irritation and inflammation of the nerves of the teeth. The common saying "almost crazy," expresses it very exactly; the patient is off balance from intense suffering in the head and spinal column, shoulders, arms, etc., all due to reflex nervous action. A large proportion of lunatics have defective teeth, and reflex nervous action figures largely in many cases.

Dr. Morgan then related a case in his own practice in which a patient was entirely and absolutely cured by extracting abscessed teeth.

From a severe dental irritation she became delirious, and in ten days was sent to the asylum a raving maniac. After remaining in the asylum some months she grew better and was sent home, but growing worse was sent back again. Her teeth needing some further attention, Dr. Morgan was sent for, who extracted the offenders. The next day she returned to the office with the brightest, happiest face ever seen on a young woman, and said: "Doctor! I am well once more. The dreadful headache, which was the cause of all my troubles and my confinement in the asylum, is entirely gone. I am free from that terrible gripping and tearing in my brain that I have felt with every pulsation of my heart. Thank you a thousand times. I am well to-day; I am fully conscious of it. The loss of my teeth is a matter of very small consideration compared with the immense relief obtained through the sacrifice." And she was well. Artificial teeth were inserted, she married, lived a few years, and then died, but with no return of insanity.

Continuing, he said, you will find many patients in a lunatic asylum whose teeth simply dissolve away bodily, without any cavities of decay; doubtless due to some peculiarity in the secretions. If a dentist was attached to the asylum he could see his patients as often as necessary, and would have an opportunity of making many experimental trials, which certainly would do no harm, but might be productive of great benefit to humanity. It offers a vast new field for exploration and investigation.

He also related a case in which he treated suppurative front teeth for a child suffering with serious "summer complaint," which had baffled the skill of physicians to cure. The relief was positive, and almost instantaneous. Evidence of reflex nervous action.

Dr. Morgan, in conclusion, said, whenever nervous diseases are caused by nerve irritation, it comes within the reach of medicine and ought to be relieved. The source of nervous irritation can always be removed, especially when caused by dental irritation.

Dr. Hinman said it was his opinion that it could only be done by a special Act of the Legislature.

Dr. Johnson said the Trustees have not the power to use money for this purpose unless a special appropriation is made by the Legislature. Believing them wise and efficient officers the Legislature generally makes any appropriation the Trustees recommend. He thought it took about \$85,000.00 to run the Asylum annually. This small amount would never be felt, and would probably be the means of affording more relief, to say nothing of real benefit, than anything requiring the same amount of money that could be instituted.

On motion, Dr. H. H. Johnson was appointed chairman of the committee on the business embraced in the resolution, with the power to appoint his own coadjutors in the work of properly placing the matter before the Trustees of the Asylum.

Dr. H. R. Jewett then offered the following resolution:

Resolved, That each member of the several committees appointed to prepare a paper on the different subjects for discussion before the Convention, shall prepare such paper and forward the same to the Committee on Essays and Voluntary Papers three months before the meeting of the Convention at which they are to be read, and that said committee shall have printed fifty copies of each of the same, and distribute them to members of the Society who may apply for them before the meeting of the Convention.

(TO BE CONTINUED IN NEXT ISSUE.)

PYORRHŒA ALVEOLARIS-THE CAUSE.

BY GEO. B. CLEMENT, MACON, MISS.

We have never been satisfied with the given causes of this most dreadful affection, and for several years have labored in the hope of finding a direct cause, and believe that the result of our investigations will solve the problem.

In the first place, we will state that two theories have been advanced and partly accepted. The first of these we will term the "Germ theory," setting forth the following idea: That from the lodgment of *specific* germs the disease is established, and the progress governed by conditions; that it may be arrested by proper treatment, and a cure result from the utter destruction and annihilation of said *specific* germ.

The second theory is, that the direct cause is the result of an accumulation or coating of the entire root of the tooth or teeth with seruminal calculus, and that a perfect and careful removal of this substance, with proper treatment, will bring about a cure.

Now, we agree, that IF either of the above theories be true and correct, that proper treatment would in every case result in a speedy if not permanent cure, BUT the simple fact of failure in every case of this affection to complete a permanent cure, proves to my mind that the theories above mentioned are false, unfounded and misleading.

As it now stands, experience teaches that the disease is, so far as known, *incurable*. So to prove a theory of the cause, we must produce one that will suggest relief, and thus demonstrate its claims, or we must produce one that will prove the impossibility of a cure, and thus substantiate the experience of the entire profession for the past ten years.

Now to our theory and its claims. We will state that for the past few months we have been making transverse microscopical specimens from, first, the roots of teeth in a healthy condition; secondly, specimens from the roots of teeth affected by the disease under consideration. In making these specimens we have spared no painstaking, and prepared them in the following manner:

First, make a transverse section with a small saw. This is then ground down by lathe, first on corundum wheel; secondly, oil stone; thirdly, on fine Arkansas stone; fourthly, polished by means of chamois leather tightly stretched and glued to glass slab.

This gives the thinnest imaginable specimen perfect in outline, and every particular. (In our opinion this is the only way to get a perfect section.) We wash this specimen, first, in turpentine; secondly, in a weak solution of caustic potash; thirdly, in alcohol, and then finally mount in balsam. All of these sections are treated in the same way—class of teeth from which cut near the same in every particular as to age, color, etc.

These specimens show up as follows: One quarter objectior taking in the diameter from center of nerve canal to interzonal layer; one half objectior taking in about half the section, one inch objectior taking in entire specimen.

We mention this fact as we have used from one to one-tenth objectiors in our investigations.

Plate A. Perfectly healthy tooth.

Plate B. Slightly invaded by the disease.

Plate C. A specimen of well developed Riggs' disease.

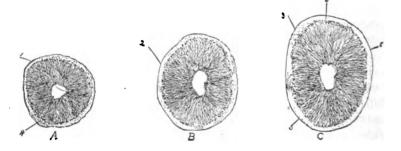


Fig. 1. A., shows peridental membrane.

Fig. 2. B., shows loss of peridental membrane.

Fig. 3. C., shows only one of two places on periphery of diseased tooth when there still remains a slight attachment of peridental membrane.

Fig. 4. A., shows lacunæ of crusta petrosa, completing vital union from tubuli to pericementum, and through pericementum to organism.

Fig. 5, 5. C., shows complete obliteration of lacunæ, cutting off vital union between the formerly organized cementum and peridental membrane, thus destroying the co-operation of life force from within, through pulp, and life force from without, through peridental membrane, resulting in a destruction of said membrane and a loss of vital union between the tooth and organism.

Fig. 6. C., shows formerly organized cementum.

In the human tooth we have three organized structures, each adequate to perform the function for which it was intended. The enamel deposited from within out, is at once the hardest structure of the tooth, and is equal to the task of exposure and mastication.

The dentine deposited from without in, forms the principal tissue of the tooth, acting as a casket for the pulp from which it is formed, and as a sub-structure to the enamel and cementum.

The cementum, or "crusta petrosa," is the third substance, and is deposited from pericementum. It is unlike either dentine or enamel in its minute anatomy, and also in its formative structure. It is formed downward and upward, and covers the entire root of the tooth, meeting the enamel by a feather-edge. It is admirably adapted to perform its definite function, and forms the only structure of the human tooth capable of forming, and, under favorable circumstances, maintaining, a co-operative vital union between the tooth and organism throughout life.

Now, as stated, these three tissues are dissimilar in both structure and function. They are formed by nature to subserve a definite and fixed purpose, and this purpose is as before stated.

Now, enamel nor dentine could neither, by any known law of nature. form a vital union with the organism. They are both destitute of that peculiar organization which we find established in the osseous structure, throughout the organism, and by which a system of vital function is established and maintained throughout life; provided, this vital function is not impaired by a perverted nutrition. tissue of vital union with the cementum or crusta petrosa partakes of the nature of both dentine and bone, and so nearly does it approach the latter in anatomical organization that it sustains the same relation in regard to function in part, and is thus given the same covering as periosteum. We find no difference in the physiology, pathology or minute anatomy of the pericementum and the periosteum of other bone. We find that life from the organism is conveyed to the periosteum and pericementum in the same way, and from the periosteum and pericementum to the bone and cementum in the same way. We also find that the cemental structure, like that of bone, is organized. Yet we must recognize the fact that there is no functional activity originating within these structures, but that they depend respectively upon the pericementum and periosteum for both life force and nutritive supply. (let this be passive or accumulative,) also, for the vital union, without which it would in time suffer expulsion.

The cementum, then, of the human tooh is a definite tissue of the organism, performing a definite office, and that is promoting, and, through the peridental membrane, sustaining, a vital union between the tooth and the organism. Now, there is no tissue in the organism but what is subject to change through or by perverted nutrition, and we claim that the so-called Riggs' disease is simply a condition, and is the result of perverted nutrition in the cementum, and a change of structure in the way of deposition without organization, and partial obliteration of previously organized cementum. This is brought about by an infiltration of calcic matter, with a secondary non-organized deposition from the peridental membrane, which destroys by displacement and actual intermention the vital union of the tooth and pericementum, resulting in the symptoms and conditions which characterize the disease.

Now we wish to, in a manner, compare and present facts.

In the first place, microscopical observation bear us out as shown in cut. Then solid calcic structure is the rule in all teeth subject to this trouble, showing a tendency to perfect calcification of each and every tissue, the cementum abnormally so. The subject of this affection is usually robust, with a tendency to hyper-osseous system, frequently to the detriment of the nervous system, the absence of mechanical calcic deposits demonstrating the fact that all the lime salts are being assimilated by and through the nutritive system, and to the cementum as perverted nutrition. The character and progress of the disease is slow, always from cervical margin to apex, demonstrating the fact that the destruction of vital union is secondary to a slow ossific change in the regular process of original formation from cervical margin to apex.

Again: A perverted nutrition commencing at the apex in the form of exostosis, is rapid in growth, perfectly (yet abnormally) organized tissue, capable of sustaining vital union and shows up lacunæ under the microscope. That teeth affected with exostosis seldom if ever (I never saw one) are subject to Riggs' disease, demonstrating the fact that a tooth capable of rapid change and at the same time maintaining organization in cemental structure, is not subject to the disease under consideration, and that the changes that take place in the one is just the reverse in the other.

Such a pathological change in the cementum as we claim to take place would result in all the symptoms and conditions which arise in the disease as now known, and would at once demonstrate the fact and substantiate the experience of the profession at large that the disease is utterly incurable by and with all the remedies and

treatment as used and practiced at this time. In doing this it goes far to prove the correctness of the theory which I most humbly advance. It is true this disease is hereditary, and like all such diseases we may look for those abuormal changes of structure with frequently accumulative tendency.

The change in structure as claimed to take place in the cementum is no more impossible than the crystallization of the crystalline lens or the hypercalcic condition of the toe or finger nails, the one resulting in a cataract of the eye, the other in an exfoliation of the nail.

Now, we presume, all are familiar with the histology of tooth structure, and we will only refer to the two nutritive channels through and by which the dentine and cementum are formed. The one is from and through the pulp in its original potoplasmic state; the other from the pericementum which, in our opinion, was originally the placenta of the germ of the tooth.

Now, the force from these two sources, supported of course by the organism at large, begin work at or about the same time. works from without in,; the other, from within out. They thus establish, co-operatively, the interzonal layer, from which they begin These forces continue throughout life gradually losing the power of accumulation, and eventually sustaining simply a passive condition of life. If either be perverted, we find as a result of this renewed and abnormal activity a pathological condition presented. In the case of the pulp we frequently find a too rapid deposition of dentine closing in on the very organ which gave it existence, producing a strangulation and death. Frequently we find spicula or pulp-stones as a result of this perverted nutrition in the pulp. the case of perverted vital activity in the pericementum, we find, as a result, exostosis at times, and then the state of affairs as produced in this paper which we claim to be the first and only cause of "Pyorrhæa Alveolaris." We have under consideration the treatment of this trouble, and hope at some time in the near future to present it to the profession, provided it proves successful, and to give it a proper name.

DR. W. H. INGHRAM, formerly of Atlanta, has decided to locate in Macon, where he will practice diseases of the eye, ear, nose and throat. We hope Dr. Inghram will succeed in his new home, and we take pleasure in commending him to the good graces of the Macon profession.



MISCELLANEOUS AND SELECTED.

ONLY A DREAM.

I am nothin' but a poor, ignorant country dentist, but have been workin' at the trade for nigh on to twenty-five years. I have tried to do my best for all the people that have had me work for them, and I don't know as I have done what was best every time, but I do know that I never done what I knew was wrong. Some time ago I got a notis of a meetin' where a lot of dentists were to meet and discus different pints in our trade. It was the first I had ever got. and I took it home to show to Sarah (she's my wife.) We talked it over, and she finally said to me, "Why, Thomas, it says it wants you to come." I hadn't that it ment me in 'ticular, but when I come to read it over carefully I saw it said Dear "Dr. we would be pleased to have you come." Well, Sarah and me talked it over every day till it was nearly time to go. To tell the truth she did not like to have me go so far away without her; but she finally consented, and the day before the meetin' was called she had my valise all ready for me to go. I got on the cars, and in due time the man called out the city where I was to get off. The directions said they were to meet at a certain tavern. When I got off the train and was going out the depot, a man says to me, "Hotel, sir?" I said yes, and told him where I wanted to go and what there was to be there. He opened a door to a two wheel cart. I got in and he drove me to the place. He charged me fifty cents for it. If ever I get hold of a tooth in that man's mouth; but may the good Lord forgive me for my evil thots. Right here I might tell you how I had to pay for even ice water. Had to give a grinnin' nigger money for some-How they slid me in a box to carry me to my bedthin' to eat. room. How I had to pay \$5.00 a day for my board. It would take a large book to tell it all, so I will proceed to the meetin' part. The next mornin' I waited round till I was tired for that meetin' to commence, and not seein' any signs of it I asked a man, and he says, "Come with me, I am goin' there to read a paper on the evil results of amalgum fillins."

Well the meetin' passed off kind of nice, and it was good to hear each dentist tell his experience. Before we closed the head man said, "We will listen to Dr. Brown's paper."

I never heard a man so gifted-like before. He spoke on the beauty of gold as a fillin', and that it was the only fit thing to put in any-

body's mouth, and related case after case of persons who had come to him suffering bodily diseases, and that he had cured saltrum, catarr, diabetus, cold, etc., by removin' amalgum fillings and puttin' in gold.

The meetin' then adjourned sina dye. I came home, and the first thing Sarah says to me, "Thomas, what's the matter?" Sarah, I says, I am a murderer; I have caused lots of people to die. I have sent unborn babes to purgatory by filling their mother's teeth with amalgum. She says, "Thomas, you have been drinking." I told her I wish I was drunk, and to explain I told her what that city man had sed. She called me an old foole; told me to go to bed, dream over it, and the next morning I would feel better. I went down to the office and got an old tooth that I had pulled for a man, who told me that it had been filled over thirty years. The tooth had got loose, but the amalgum fillin' was in it as good as ever.

I put it under my pillow when I went to bed, and this was my . . . I had just finished sweepin' up the dirt in the office one mornin' when a lady came in and says "Good mornin'. doctor." I said good mornin' as sweet as could be, as she was uncommonly good lookin', and asked her would she have a seat, which she did. After I had slicked up a bit I asked her what I could do "Doctor," she says, "I guess you do not remember me. Don't you remember fillin' some teeth for Cora Smith before she was married." Then we had to talk old times a bit, and I asked her how the fillins were I put in her teeth. She says, "They are all right, and that is what I have come to see you for, and if you like I will tell you quite a story about my teeth." As I did not have much to do I told her I would be pleased to hear her. "Well," she says, "after I was married I moved to the city, as you may know, and, as my husband is welthy, we live in good style. One day I had a pain in my face, and was reckomended to Dr. (I swow if she did not mention the city dentist's name that had read that paper on amalgam fillins,) as one who knew how to do the best work. He looked in my mouth, and said the pain came from those fillins you put in. I kind of doubted his word, as they were not sore, and told him I did not think they did. He said that the mercury in the fillins caused the pain; that it was poisoning me, but I did not let him remove them. Well, he took a little hook like a croshay hook, and finally told me that my teeth were very bad; one he would have to put somethin' in it before he could fill it, and what he put in stopped the pain, and in time I had them all filled with gold. Within six months some of them got tender near the gum, and I had two of the fillins taken out and filled over. Well, to make a long story short, every time I went to him he wanted to take out those fillins of yours and put in gold. Once, I remember, I had a cold, and my throat was sore, and he told me that if I would allow him to remove them I would get well; that there was enough mercury in them to kill a whole village, but I would not allow him to disturb them. Somethin' has been the matter with those fillins of his every little while. I have had them filled and filled, till he at last told me my that my teeth were too soft, and would not stand gold, and he has filled them with a cement. The cement is comin' out, and as we have moved to a city nearer my old home, I have left them to see you. Now, doctor, I want you to look them over and fill them with the same fillin' you put in the others some twenty vears ago." I looked them all over carefully. How well those fillins had preserved the teeth. One was a lower molar with a large cavity on the top of the tooth that extended over the side, way down into the gum. It was all there, with no sign of any decay. As the mornin' was well gone, I asked her if she would come in the afternoon. She said she could, and I filled all of the teeth with Every year that lady comes to see me about her teeth, amalgum. and till her death some ten years after, I only had to refill one tooth, and that was one she had broken eatin' pop-corn.

I have been dreamin' a good deal lately. The other night I dreamed of rubber plates causin' sore mouths, but I waked up to know it was only a dream.

Plain Thomas Jones, in Items of Interest.

DR. CHARLES B. ATKINSON says that twenty-five per cent. pyrozone, ethereal solution, is probably the best bleacher for teeth that has ever been offered. Its effect is exceedingly prompt and the result permanent. The process is not attended with pain unless the gums be touched, when a severe prickling sensation is produced, and a coagulum seems to form in most cases; but this will return to a normal condition if not abraded. He also recommends it in treating abscess pockets and suppurating pyorrhea alveolaris.

THE question of how to make dentists is simply a problem of special education and training, and one which must involve a recegnition and adaptation of the broad fundamental principles on which all education rests. The belief that the manual training idea or physiological method, is one which promises the very highest results, is widespread.—Dr. Felix Adler, in Review.



GUM-LANCING.

Clinically, I am absolutely sure that I have seen convulsions, sick stomach, great restlessness, fever, and various other functional disturbances in young children, immediately cured by the use of the gum lancet, after the failure of various other well directed measures for relief. Theoretically, I am in accord with Dr. Kirk, in believing that Dr. Forchheimer absolutely misses the point of the matter by his failure to understand that the good achieved is not due to the local blood-letting or to the relief of the inflammation of the gum, but to the removal of the backward pressure upon an extraordinarily sensitive and (at such times) congested tooth-pulp. As was long ago pointed out by Dr. J. W. White, at the period of eruption the roots of the teeth are incomplete.

Lhave myself seen a seemingly incurable epilepsy in an adult permanently cured by the removal of a persistent milk or first dentition tooth. Amaurosis and various other conditions in the adult are well known to be the result of irritation of the trigeminal nerve by faulty teeth. How much more is evil to be expected from teeth-irritation in the child?

In conclusion, I reaffirm that whatever the theory in the matter may be, I am positive that gum-lancing is the most important therapeutic measure. It is essential, however, that it should be thorough, and with the object of dividing the dense tissues that bind down the teeth.—H. C. Wood, in University Medical Magazine.

CURE FOR THE TOBACCO HABIT.

Gentian root has been recommended as an aid in overcoming the tobacco habit. Small pieces of it are chewed occasionally as a substitute. Its pleasantly bitter taste and "tonic" effect may help to overcome the craving for tobacco. This remedy is said to have been recommended by Dr. Trask, the well known anti-tobacco man, a "chew" of the coarsely powdered root, equal to the ordinary quantity of tobacco, to be used after each meal.

The person undertaking to discontinue the use of tobacco must by no means consider that this treatment will "cure" him against his will, so to speak. It may aid, but will not do alone, the work of putting off a habit.

STERILIZATION OF METALLIC INSTRUMENTS.

After cleansing by the brush and unbleached linen, the instruments are sterilized, either by steam, hot air or boiling water. The proceeding recommended as the most simple is first to brush with soap and water, then boil from ten to fifteen minutes in a one per cent solution of carbonate of soda; fifty per cent. more of soda should be added if the water is hard. After cooling, and during the operation, the instruments are placed in boiling water containing one half per cent. each of carbonate of soda and carbolic acid.

After operation, the instruments are first washed in pure cold water, then immersed and brushed vigorously in a one per cent solution of soda, to which soap has been added; then rinse and finally polish with a polishing stone and alcohol, or with a bit of chamois skin. Lastly, wash with a solution of carbonate of soda and carefully dry.

The brushes are sterilized by boiling in the soda solution for twenty or thirty minutes, and are kept immersed in a one half per cent. solution of corrosive sublimate.—Exchange.

CARE OF THE EYES.

Avoid reading when lying down. Sit with the back to the light or so the light will come over the left shoulder when reading, sewing or writing. When writing, should the light come from the right side, the shadow of the hand and pen or pencil falls on the paper, constantly shading the line of work and fatiguing the eye. Veils, especially spotted ones, are injurious to the eyes; and, if veils must be worn, they should be of the softest, clearest net. The eyes should be rested five or ten minutes after each hour's reading. The study of music and German is hard on the eyes, and the eyes should be rested more frequently and longer at a time when engaged in these studies. Avoid facing the lamp-light when studying. A bad stomach sometimes makes bad eyes. Attend to the digestion. Poor ventilation frequently weakens the eyes. When they feel tired, bathe them with soft water, hot or cold, whichever on trial proves more comfortable. The hot water generally proves more beneficial. Exchange.

"Too many men," says an exchange, "try to pull themselves out of trouble with a corkscrew." True enough, but a pull with the forceps does the thing up nicely.

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THE

Southern Dental Journal and Luminary.

A MONTHLY PUBLICATION

DEVOTED TO THE INTERESTS OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. Johnson, 306 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to Drs. W. R. Holmes & Mason, 556 Mulberry St., Macon, Ga.

Editorial.

"CEMENTS AS ROOT FILLINGS."

Editor Southern Dental Journal and Luminary:

DEAR SIR.—"Cements as Root Fillings," in your June issue, deserves, it seems to me, not to be allowed to pass unnoticed, it being so at variance with conclusions reached by my own experience and, I trust, with that of many others.

In the first place, that the phosphates are harder than the chlorides, I am sure is an erroneous statement. "Agate" cement, (an oxychloride) in my hands makes a filling not only very much harder than any phosphate that I have ever tried, but also than any such that have come under my observation from the hands of other operators. Next to good hard enamel I know of nothing that will more quickly transform even a new "revelation bur" into a pretty fair burnisher, than a first class agate filling that has been in the mouth about a year.

Again: You state that these materials have not proven satisfactory without telling us what have been more so. It must be admitted that a long time is necessary in which to test root fillings, and my conclusions are based upon fifteen years of practice. Perhaps fifteen more will suffice to change the opinion now held.

Equally so is it true that when inflammation appears (whether or not it results in abscess) several years after the filling of a root canal, it must be impossible—absolutely so—to decide whether it is

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due to the material that was used or the manner in which it was done. If a certain material (I care not what it is,) is used by a certain operator, and, in his hands gives a large percentage of successes, I do not see why the few failures met with should not be attributed to the manipulation rather than to the material.

Having been originally taught to use "Guillon's" cement—a slow setting oxychloride—for root filling, and the results with it having been so satisfactory from year to year, no other material has ever been used, there being no inducement to "try" any other. Only within a few weeks have I seen a lower molar so filled twelve years ago and found in perfect condition; and there is no doubt in my mind but that the cement put there at that time is still all there. For I cannot imagine how a cement filling can be washed out of a root canal, which must be inferred you believe occurs, from your statement that the one is "more durable" than the other.

A cement filling properly mixed and inserted in a coronal cavity is absolutely impervious to moisture, and no odor can ever be discerned in the center of the mass. If, therefore, upon opening into a root canal that has been filled (?) with cement, and the filling is found to be porous, the only theory to account for the condition presenting is, that the canal was not completely filled. For there is no more reason for the cement within the root to become porous than that in the crown.

When a case presents itself in which the apical foramen is sufficiently large to allow of the plastic filling to be forced through, it is deemed necessary to close that point with a solid substance, (usually orange wood on account of its easy manipulation) after which the cement can be used without danger of that result.

To-day, from these fifteen years of practice, including cases from the hands of other operators as well as my own, I conclude that a pulpless tooth, however satisfactorily filled its root canal may be, is not capable of withstanding "shock" as well as its live neighbor; and an irritation of any kind whatever that will pass the latter harmlessly by, may at some period find in the former a suitable "culture" whereupon trouble ensues. Respectfully,

C. EDMUND KELLS.

AUGUST 7th, 1893.

I must say it is with considerable trepidation that I essay to cross swords with one who has achieved so much reputation and exhibited such depth of learning on previous occasions. It almost makes one quake with fear to have such men differ with you. However,

a man's opinion is his own, and he is justly entitled to it so long as he can defend it with clear and reasonable arguments. But arguments and discussions concerning filling materials preferred by difent operators, for root canals, will always result in a fruitless multiplication of words. Almost any material suitable for this purpose will admit of forcible argument pro et con, and I have seen in a recent Journal that Mr. David Headridge, an L. D. S., of England, comes to the front with the remarkable assertion that pulp canals should not be filled at all. This remarkable idea was advocated by Herbst and others several years ago, and probably comes from too much theoretical teaching to the neglect of practical training.

This editorial referred to by Dr. Kells was not written with the hope or expectation of changing the opinion of a single individual concerning his method of filling nerve canals. I simply wanted to go on record as saying that the cements, as fillings for root canals, on account of the susceptibility of their being acted on and disintegrated by the mephitic gases and other products of decomposition of organic matter, were not as reliable and satisfactory as materials that could not be thus affected.

I have based this opinion on my observation in practice, of course admitting that if we could ever obtain the *ideal* cement we have been looking for, all discussion would cease at once. The ideal filling not only for roots but crowns as well, would be found. This ideal filling seems to exist in "Agate Cement." I have never tried or seen any fillings that were made with it, but I am satisfied it is *the* material we have been looking for these many years.

A cement that will, after standing a year, make a burnisher out of a Revelation Bur, is good enough for me, and I will modify my statement by excepting those fillings made with "Agate Cement."

Dr. Kells says, when inflammation appears after a root has been filled several years it is impossible to tell whether it is the fault of the filling material or the operator. That is a part of my argument against cements, (that I have used and seen used.) They are all right if they do not absorb these products of decomposition, finally themselves giving off a gas that sets up pericemental inflammation, and sometimes resulting in abscess. Cements with which root canals are filled cannot be manipulated if mixed very thick, especially if it is a tooth with several canals to be filled at once, and it may be from this cause they are more readily disintegrated. I have had occasion to remove crowns that had been cemented in place for a year or two and have found the same state of affairs there. This disintegration or absorption of putrescent fluids seems to take

place more readily when the filling is encased or sealed up, as in a canal or under a cap fitted over a devitalized tooth.

When it comes to citing single cases I can beat Dr. Kells a few years. I saw a cement filling that had actually done service in the crown surface of a molar for seventeen years, and finally came out by the tooth breaking down from decay that started in a new place.

I did not mean washed out of a root canal, as Dr. Kells thought, but disintegrated.

He further says, that all large apical foramens should be closed with a *solid substance*, usually *orange* wood, on account of its easy manipulation.

Now, if orange wood is not a substance subject to absorb and swell, and decompose, I would like to know what you would find that would. Then, again, I would like to know how Dr. Kells or any living man can tell whether his peg of orange wood has accurately closed the irregularly enlarged foramen, and if it has closed up as well as the operator cared to, can he tell whether or not the peg projects or does not go quite far enough. And can he tell whether the inflammation set up after a time, is not an irritation of this peg that did not go far enough or went too far, or did not thoroughly close the foramen. I am not an advocate of orange wood either, nor of any other woods of which I know. Rich pine would be better than orange wood. That does not decay nor absorb moisture to any great extent.

As I have said before, there is such a diversity of opinion on this subject that no material will suit all, and every one must use that which suits him best and with which he is most successful.

EDITOR.

FOR SALE.—In a healthy Southern seaport city, a dental practice of several years standing. Cash receipts from \$2.500 to \$3,000 a year; expenses small; only one other dentist in the county. Will sell for cost of furniture and dental outfit. One half cash, balance in six and twelve months. Failing eyesight is the only reason for selling.

Address

VALENTINE,

Care Macon Dental Depot.

Wanted, copies of SOUTHERN DENTAL JOURNAL, for July, 1892. Will pay the subscription rate for them. Address the Editor, Dr. H. H. Johnson, Macon, Ga.



THE

Southern Dental Journal

AND LUMINARY.

Vol. XII.

Macon, Ga., October 1, 1893.

No. 10.

THE WORLD'S COLUMBIAN DENTAL CONGRESS.

The idea of holding a World's Columbian Exposition at Chicago in 1893, bringing together the products and peoples of the earth, was naturally the outcome of the ideas, subsequently originated, of holding various Congresses for the advancement of science and art. The dental profession did not lag in the procession, but early fell into line and resolved to gather together such a congregation of dentists as had never been seen before.

Though it had before been spoken of, the first effort at organization was made by the New Jersey State Dental Society, at its meeting in Montclair, N. J., on January 11th, 1890. The following resolution was there offered and adopted:

"Deeming it fitting and the proper time for holding an International Dental Congress in the year 1892, the New Jersey State Dental Society has appointed a committee to act in co-operation with like committees from other dental societies throughout the United States. They would request your Society to appoint a committee to meet with them at the Hoffman House, New York, on Tuesday afternoon, April 8th, to formulate plans for the holding of the first International Dental Congress."

In pursuance of this call the committee met, but only a few of the other Societies responded, some considering the action of the New Jersey Society a little premature. The question was then referred to the two representative bodies—the American and Southern Dental Associations—at their next meeting. The Southern met

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first at Atlanta, Ga., in July, 1890, and the following resolution was read by Dr. L. D. Carpenter:

"WHEREAS, There is to be a World's Columbian Exposition in Chicago in 1893; and

"WHEREAS, In consequence of the fact that the choicest products of the world are there to be displayed, it is expected that citizens in large numbers of all civilized countries will be gathered together there for the purpose of seeing these exhibits; and

"WHEREAS, It is to be presumed that many dentists from foreign countries will visit the United States at that time; and

"WHEREAS, The time of the Exposition will be an opportune occasion for a great meeting of the dentists of the world; and

"WHEREAS, It is believed that a great advance in science and the practice of dental and oral surgery would result from a meeting of the dentists of the United States with those from foreign countries who might be visiting in this country; and

"WHEREAS, It is desirable that any meeting then held should be at the instance of the American Dental Association and the Southern Dental Association, and organized by a joint committee by them appointed; therefore, be it

"Resolved, That the President of the Southern Dental Association appoint a committee of five to confer with a like committee that may be appointed at the next meeting of the American Dental Association upon this subject, and that this joint committee have power to fill all vacancies, and shall add to its membership either one, three or five more members, as it may deem it advisable, and when this committee is so completed, it shall be clothed with full power to take such action as in its judgment it may deem best for creating an organization for the purpose of holding a Dental Congress in the city of Chicago, in 1893, which the reputable dentists throughout the world shall be invited to attend, and that any action that this committee may take in the premises shall be final and binding."

L. D. Carpenter, Atlanta, Ga.; J. Y. Crawford, Nashville, Tenn.; W. J. Barton, Paris, Texas; J. Taft, Cincinnati, Ohio; C. S. Stockton, Newark, N. J., were appointed on the committee of the Southern Dental Association.

The American Dental Association, at its meeting at Excelsior Springs, Mo., in August, appointed on their committee, L. D. Shepard, Boston, Mass.; W. W. Walker, New York, N. Y.; A. O. Hunt, Iowa City, Iowa; H. B. Noble, Washington, D. C.; George W. McElhaney, Columbus, Ga.

The two committees, in joint session, increased their number by adding John C. Story, Dallas, Texas; M. W. Foster, Baltimore, Md.; John S. Marshall, Chicago, Ill.; H. J. McKellops, St. Louis, Mo.; A. W. Harlan, Chicago, Ill.

This joint committee constituted the Executive Committee, who, by their united efforts and a sacrifice of both time and money, organized and made a success of the World's Columbian Dental Congress.

FIRST DAY-OPENING SESSION.

(Report from Dental Cosmos.)

The session was called to order by Dr. W. W. Walker, Chairman of the Executive Committee, who introduced Hon. C. C. Bonney, President of the World's Congress Auxiliary.

Dr. J. Taft invoked the divine blessing upon the deliberations of the Congress.

President Bonney delivered the following address:

Officers and Members of the World's Columbian Dental Congress:

The science and practice of the art of dentistry most conspicuously represents one of the most important movements of the agethe specialization of scientific pursuits. The old fields of research and application were so narrow that they were readily mastered by the learner and practitioner, who scarcely realized indeed the importance and the magnitude of the different branches to which, as occasion required, he turned his half-trained hand. All this has been changed by the marvelous development of modern civiliza-The horizon of scientific attainment has been lifted and extended, until only a powerful glass can trace its outlines. In the swiftly developing evolution of arts and sciences, the great work of logical and orderly differentiation has gone forward, sub-dividing the professional and other pursuits, until now he who would command the confidence of his brethren and the public must have more than a general knowledge of the department in which he is engaged. That, indeed, is indispensable, but it is not enough. physician and surgeon cannot be trusted to deal with the exact mechanism of the eye or ear, or with the important and delicate relations of the teeth. A lifetime may be spent and the highest abilities and attainments be exercised in their field. ioned tooth-carpenter, with his entirely appropriate name, has, like the Dodo, become an extinct species, and in his place we find the modern doctor of dental surgery, accomplished, learned and skilled, familiar with anatomy, histology, etiology, pathology and bacteriology, chemistry and metallurgy, as well as with the practical operations of the art.

In welcoming you to this Congress, I congratulate you upon the admirable program by the committee of organization, and upon the international character of the papers to be presented. Germany, Austria, Scotland, Armenia, Greece, Finland, Norway, England, and other countries unite with the American States in this Congress. May it realize your past expectations, and be fruitful of the most satisfactory results. The realization of this organization by which this Congress has been constituted are represented on this occasion by Dr. W. W. Walker, the Chairman, who will now be presented to you as representing not only this general committee, but the Committee of the World's Congress Auxiliary, with whose co-operation the Congress has been constituted. I have the pleasure of presenting to you Dr. Walker.

Dr. W. W. Walker then spoke as follows:

President Bonney, and Officers and Members of the World's Columbian Dental Congress, Ladies and Gentlemen:

After the very flattering remarks and most cordial welcome of our esteemed friend, the President of the World's Congress Auxiliary, the Hon. C. C. Bonney, it is hardly necessary for me at this time to recapitulate that which has so often been placed before the reputable dentists of the world by this Executive Committe in circular letters, through the dental journals and other dental literature, as to how the World's Columbian Dental Congress was born and organized. Suffice it to say, it was the joint resolution of the two foremost societies of America—the Southern Dental Association and the American Dental Association, that this Executive Committee of fifteen should organize a Dental Congress in this city at this time, and that their action should be final.

The Executive Committee has done only that which we considered our duty. We have laid aside all personal feeling, if any ever existed; we have been working hand in hand and shoulder to shoulder to accomplish for our chosen profession that which places it where it should so justly and truly be placed, in the front rank of scientific professions of the world.

In the performance of that duty, many obstacles have arisen, but "there is no such word as fail" in our vocabulary, and with the assistance of those who have worked with us the result has been accomplished.

As a recompense for the work we have done, all we ask is that the members of the two organizations and the members of the World's Columbian Congress, after it is over, will say, "Well done, good and faithful servants."

I now have the honor of introducing to you the President of the World's Columbian Dental Congress, Dr. L. D. Shepard, of Boston, Mass.

President Shepard: No extended words are expected from me at this time. I will now call upon Dr. Walker to proceed with the introduction of the other officers of the Congress.

Dr. Walker then introduced the remaining officers of the World's Columbian Dental Congress.

ADDRESS OF WELCOME

BY DR. J. Y. CRAWFORD, NASHVILLE, TENN.

(Owing to the inability of Hon. John Temple Graves, of Georgia, to be present to deliver this address of welcome, Dr. J. Y. Crawford consented at a few minutes' notice to welcome the foreign representatives.)

President Bonney, of the World's Auxiliary Congress, Mr. President of the World's Columbian Dental Congress, Ladies and Gentlemen:

You will excuse me for saying that I am very much embarrassed at being called upon at this late hour to make the address of welcome, in this room and in the stead of the distinguished scholar and orator from Georgia, Hon. John Temple Graves. I am further embarrassed from the fact that I am to stand here as the mouthpiece not only of the dental profession of the United States, but as the mouth-piece of the whole people composing the American Union. Quite seventy million of hearts to-day are expressing through me their universal welcome to the dentists of the world! How sublime a thought it is that America is now extending through me this hearty welcome, and saying to you, "Be with us and among us, and assist us in furthering the grand work of the dental profession." I am additionally embarrassed from the fact that I welcome you here to-day for the purpose of discussing the advancing of the munificent art of dentistry, as it is to-day a question of paramount importance to all other questions. I am sorry that Mr. Graves is not here to discuss the question of dentistry from the standpoint of public necessity. Why do I say that? Because of all other questions in the world that address themselves to the civilization of the nineteenth century, the question of dental surgery stands at the head

of the list. Why? Because all other departments of learning and advancement have received more assistance and attention than the dental profession, and because yet it is not a universally recognized fact that the human family needs the good offices and attention of the dentist as they need their doctor, as they need their preachers, as they need their teachers and their lawyers.

It is becoming in America to open wide her gates and extend a welcome to the dental world, because she leads in that vocation. We are here for the purpose of furthering the grand work of our profession, until this the civilization of the present age shall be touched and benefited to the extent that will tend to the increase of the average length of human life, and perhaps be a potent factor in the perpetuation of the most remarkable civilization in the world's history.

Now to the gentlemen from foreign countries, it is my pleasure as well as my duty to extend to you a most cordial welcome; and in calling your attention to the ensign of the Republic, the Stars and Stripes, I wish to say that banner is not only an insignia of political and religious liberty, but its most beautiful signification is the gracious hospitality we extend to you to-day; all of this, and more if we had it, would be freely offered to you on this notable occasion in the history of odontological investigation.

In conclusion, allow me to ask you to grasp my hand in your imagination, and feel the pulsation of the great heart of the American people beating in unison at this very moment; and while I stand in this attitude allow me to say that it thrills my very soul as the united sentiment of this great nation passes from me to you, when extending this form of welcome.

Letters regretting their inability to attend the sessions of the Congress on account of illness were read by the Secretary General, from Drs. W. W. H. Thackston, Farmville, Va., and W. H. Morgan, Nashville, Tenn., two of the Vice-Presidents.

President Shepard then called Vice-President A. L. Northrop to the Chair, and delivered his address, as follows:

SYNOPSIS OF THE INAUGURAL ADDRESS

BY L. D. SHEPARD, A. M., D. D. S., D. M. D., PRESIDENT WORLD'S COLUMBIAN DENTAL CONGRESS.

In presenting to you this inaugural address, my duty it seems to me should be, not to anticipate or encroach upon the work of these others, but to attempt to give a brief outline of the evolution of the profession, with the salient points which mark its progress.

That dentistry to some extent is an ancient art cannot be questioned, but so meager are the references to it, in what remains that is authentic that we may dismiss it from consideration at this time with the remark that nothing of value has come down to us from antiquity. The same is true of all the past up to the century preceding this. In fact, even as an art we may consider dentistry as modern, while as a science it is altogether modern.

There are no sharp lines of demarcation in evolutionary processes, and in their review we find the changes to be so gradual and long-continued that it is difficult to fix upon a time which is so distinctively marked as to be called a natal day. We have been accustomed to date the birth of a man from his advent upon the visible stage, and yet that day witnesses but a change of environment, and, as a large proportion of humanity believe, the birth of the soul dating months before. So dentistry had its embryonal stage; its inception is shadowed by the mists of antiquity. Through ages it slowly gained, and we cannot describe its progress. During the last century and in the early part of this century there were signs of life and movement, the quickening had taken place, the world was expectant, and the joyful consummation, by the birth of a new profession, freighted with beneficence to suffering humanity, occurred in 1839, in the city of Baltimore, by the organization of the first dental college in the world. As a scientific profession that is its natal day. There had been life before, as in the case of the man, but the environment had so changed that now there was a new air to breathe, new sources of nutrition, the barrier of the previous restricted environment was removed, and there was free chance for growth to the stature of the full typal ideal.

The Baltimore College of Dental Surgery was the first Thesaurus of dentistry. Here were first deposited the stores of knowledge which before were in individual keeping. Here, too, also for the first time in dentistry, for a stated moderate price, the student could draw from this treasure-house all the accumulated knowledge it possessed.

Let us bear in mind that the prominence given to the establishment of this first professional school, as marking a natal period, is not primarily because it was the first professional school; that is of course noteworthy, so is the establishment of a new manufacturing business in a community, for it may be followed by other enterprises, and so the place becomes prosperous—but the point should be emphasized, and it is the great point, that here was the beginning of a change of *spirit* as well as of method. Before this it was a

trade, ever mindful of self, accumulative, afraid of competition, exclusive, faithful to the immediate patient and anxious to do him good, but regardless of the rest of the world, dominated by selfish interests, carefully hoarding knowledge, with no broad professional spirit—no brotherhood feeling.

It is hard to realize at this day when there is such freedom—such fraternal feeling, and actual competition to impart knowledge—that such a contrast in professional spirit could have existed six decades ago. It is a fact, however, and there are members of this Congress who commenced their study of dentistry in the old way. In my opinion this change of spirit is at the foundation of the new era, and all progress since then may be said to rest upon it.

With similar prophetic vision and patriotic motives in this same epochal year, the great hand maid and co-laborer of the college was established by the publication of the first dental periodical in the world, the *American Journal of Dental Science*. The same spirit—the same ambition for the profession and the same regard for humanity—actuated the generous and enthusiastic founders of journalism as of the college.

The same few pioneers of progress who started the college and magazine in 1839, in association with others of like spirit and motive on August 18th, 1840, met in New York and organized the American Society of Dental Surgeons.

No authentic records of any previous dental society exist. So this society may be respected as the prototype of the multitude of societies which since then can justly claim so great a share in the growth in which we rejoice to-day.

In the organization of this society, the resolution offered by Prof. Chapin A. Harris, for the appointment of a committee to draft a Constitution and By-laws, commenced with these words, which have proved prophetic:

"Resolved, That it is the opinion of this convention that the science of dental surgery would be advanced and the interests of all well-informed practitioners and the community at large be promoted by the formation of a National Society of Dentists."

And in the constitution which was adopted, the first article struck the key note for all time in these words: "The objects of this Society are to promote union and harmony among all respectable and well-informed Dental Surgeons; to advance the science by free communication and interchange of sentiments, either written or verbal, between members of the Society, both in this and other

countries; in fine, to give character and respectability to the profession," etc.

We thus see, within a few months, the erection of the great tripod upon which all professional advancement must rest—the college, the journal, and the association.

The first aimed to thoroughly prepare the novitiate for the highest usefulness, while the broad field of the others was the great mass of practitioners of varied proficiency.

In the year 1841 was enacted the first State law in regard to dentistry. It is probably also the first law in any country. I have not included legislation as among the important and fundamental causes of dental progress, for the reason that the Alabama law stood alone among the States in this country for over twenty-five years, the next law to be passed being that of New York in 1868. The English law was enacted in 1878, and in other countries about that date or later. While an indirect and inevitable result of dental laws has been to help the colleges by making an education a prerequisite to legal admission to practice, and hence to elevate the standards of the profession, there could be no justification for such prohibitive or restrictive enactments except as a safeguard to public health under the general police powers which in modern times have become so broadly applied and universally supported by the judiciary.

The struggle to secure these laws has been long and hard. Many efforts have proved repeatedly unsuccessful, but opposition has been overcome until at the present date nearly every state and country has such laws, identical in object and essential features, and varying only in what might be called minor details. There are few now who doubt their justice and usefulness.

In securing their enactment the profession has generally taken a leading part, and it can be truthfully claimed that the motive has not been selfish but philanthropic.

The next event in dental history was so brilliant as to be worthy of being called the most notable and beneficent discovery of the century or of all centuries—anæsthesia. What discovery or invention is comparable to this, by which "the knife of the surgeon is steeped in the waters of forgetfulness and the deepest furrow in the knotted brow of agony is forever smoothed away," to quote the poetic words of the venerable, but still youthful author of the term anæsthesia, Oliver Wendell Holmes? While there has been an ether controversy, there cannot be an anæsthesia controversy. The ether controversy was waged with great earnestness and bitterness,

but with the lapse of time and the removal of those directly interested, the credit is now generally given to the late Dr. Morton, a dentist of Boston. He it was who took his life in his hands, and, with sublime courage or audacity, put in jeopardy human life to solve the problem of anæsthesia with ether. He trave'ed in darkness an unknown road; he succeeded, and demonstrated to a skeptical world anæsthesia by etherization. The Massachusetts General Hospital justly and elegantly expressed the sentiments of mankind in its inscription upon the present given him in the words: "He has become poor in a cause which has made the world his debtor."

Without detracting from the great honor due to Dr. Morton, greater honor is die to another dentist. For it is true, and is now being admitted, that Dr. Morton but traveled in another path, though hirther than had been traveled two years before to his own knowledge, by the true and original discoverer of anæsthesia, from whom he derived his incentive, the late able, but less persevering and obstacle overcoming dentist of Hartford, Dr. Horace Wells.

If we grant that the whole includes all parts, though one part may be so brilliant as to overshadow the rest; if we grant that an inventor or something entirely new is entitled to credit superior to him who invents an improvement or modification, even though the latter may be better; if we grant that the discoverer of a great truth or principle in nature is greater than the one who, following in the same lines, by using other agents or methods more fully or successfully demonstrates the truth or principle—we must admit that the greater honor is due to Dr. Wells-provided it is true that, in 1844, two years previous to Dr. Morton's discovery, Dr. Wells did intelligently and publicly, with full appreciation of the phenomena, perform painless operations in dentistry and surgery by the administration of nitrous oxid gas, given for that specific purpose. I think that history bearing this out is too explicit, too minute, and too reliable to render this statement debatable. us inquire what are the admitted facts. It is accepted by every one as proven.

1st. That Mr. G. Q. Colton did give an entertainment at Hartford, in 1844, by the exhibition of laughing gas, for amusement.

- 2d. That Dr. Horace Wells was present in the audience.
- 3d. That Mr. Samuel A. Cooley, in his antics while under the influence of gas, injured his leg quite severely.
- 4th. That, on his recovery from the effects of the gas, Mr. Cooley was surprised at the injury, and said he had felt no pain.

5th. That Dr. Wells concluded from this that the gas would be useful in extracting teeth, and so expressed himself.

6th. That Dr. Wells did put his inference to proof by an actual experiment upon himself—Mr. Colton giving the gas and Dr. J. M. Riggs extracting a tooth.

7th. That his object, stated beforehand, was to ascertain by trial whether such exhibition of the gas would render tooth-extraction painless.

8th. That Dr. Wells did state at once that the operation was painless.

9th. That Dr. Wells did many times give the gas for painless operations in Hartford, both in dentistry and surgery.

10th. That Dr. Wells had such faith in his discovery that he came to Boston in the winter of 1844-45, and was introduced to the hospital surgeons by his former pupil, Dr. Morton, and did administer the gas at the Massachusetts General Hospital, for an operation, with the express pre-stated purpose of demonstrating that operations could be painlessly performed.

11th. That the exhibition at the hospital was only a partial success.

12th. That the students derided him, and that he went home to Hartford disappointed and disheartened.

13th. That Dr. Morton had knowledge of some of these facts anterior to 1846.

14th. That the use of the gas as an anæstretic was discontinued in Hartford and elsewhere after Dr. Wells' death, and the successful demonstration of the efficacy of ether for the same purpose.

15th. That in 1862 the use of the gas for anæesthetic purposes was resumed, and that it has since been proven throughout the whole world to be a safe and reliable agent for that purpose by mamy millions of exhibitions.

The discovery of the efficacy of chloroform in 1847, and its rapid spread over Europe, to the almost total exclusion of ether, gave such fame to its discoverer, Dr. Simpson, afterward Sir James Y. Simpson, that for many years in Europe he was generally reputed to be the discoverer of anæsthesia.

These two anæsthetic agents had the field almost exclusively for about fifteen years, until the revival of nitrous oxid in 1862, so that most naturally the agent used and the resulting anæsthesia became synonymous terms in the general understanding. It is not strange that the neglected and forgotten nitrous oxid during this long period should have had as companion in its oblivion the name and fame of

Horace Wells. But its revival in 1862, and its general and successful adoption throughout the world, demonstrates that it is second to no other agent, and proves that its short use, before ether eclipsed it, was due to fortuitous circumstances in no way detracting from the merit rightfully belonging to the diffident, sensitive, generous and noble man, who so soon after, disappointed and with unsettled intellect, met his tragic death, but whose memory is still green in the field of his labors and in the hearts of his fellow-citizens.

With commendable regard for truth and history, his city and State have testified to his worth and achievements by erecting his statue in enduring bronze.

A very beautiful monument, commonly designated as the Ether Monument, was erected in the Public Garden, Boston, in 1867, by the munificence of a private citizen. The inscriptions read:

"In gratitude
For the relief
Of human suffering
By the inhaling of Ether
A citizen of Boston
Has erected this monument
A. D., 1867."

"To commemorate
The discovery
That the inhaling of Ether
causes insensibility to pain
First proved to the world
at the
Mass. General Hospital
in Boston
October, A. D., 1846."

At the time of the erection of this memorial, many of those active in the first exhibition of ether were still living and were friends of the donor. It is presumable that great care was exercised to make the inscriptions impregnable to criticism. Two things should be especially noted—the absence of any name and the restriction of credit to ether alone.

However we may view the question as to the right of first place of honor for Wells or Morton, we can congratulate the profession that both were dentists, and this greatest boon of the ages came from our ranks. So great an authority as Lecky says, in his "History of European Morals," "It is probable that the American inventor of the first anæsthetic has done more for the real happiness of mankind than all the philosophers from Socrates to Mill."

While in the following decade, 1850 to 1860, colleges, magazines, and associations multiplied and jointly contributed to bring the profession more and more in touch with progressive thoughts and truths, the most distinctive discovery of the decade and most momentous in its influences was that property of gold which, previously considered detrimental, was now to be welcomed as its most valuable characteristic—cohesion. The introduction of crystal gold and the discovery of the cohesiveness of freshly annealed foil laid the foundation for the new era in operative dentistry. Let us never forget that while others claimed the latter discovery and doubtless had known of it and availed themselves of it for some time, Dr. Robert Arthur lost no time in freely sharing his discovery, as soon as made, with the whole profession. He thus achieved a distinction of which others have never been able to deprive him.

While most of the appliances just mentioned came in during the decade 1860 to 1870, they do not constitute, it seems to me, the distinctive advance of that decade. (Here a high tribute was paid to Dr. Riggs.)

While operative dentistry has continued to ride constantly upon a flood-tide of progress and improvement, prosthetic dentistry has had its ebbs and floods. Sixty years ago the great mass of the profession were unskilled as operators, but fairly skilled as plate work-They could not save teeth, but they could replace their loss. In plate work the culmination of prosthetic skill and artistic production came with the invention and perfection of porcelain or continuous gum. After the introduction of vulcanite, the general disuse of metals made laboratory skill of little value, and hence it was neglected or ignored in the preparatory training of the student. The manufacturers supplied a great variety of instruments, so that the forging, shaping and tempering of instruments became almost The ease and facility of working of vulcanite not only called for little ingenuity and skill, but so obliterated the distinctions that the novice, after a few weeks of instruction and practice, could compete with the most experienced, and this important and most beneficial branch became the refuge and ally of incompetence and quackery. The evils resulting from the wholesale extraction of good teeth were most deplorable and cannot be estimated.

There has been grave doubt whether vulcanite in dentistry has been a blessing or a curse to the world. A superficial observer might contend that when organs so important to health were lost, it

was a blessing that substitutes could be within the reach of all but those in abject poverty. But we know to what a shameful extent the Harpies in our number, by appeals to cowardice and cupidity, despoiled the mouths of the confiding public of millions upon millions of strong and healthful teeth to make place for their bungling, disfiguring, and filthy substitutes. It did seem for a time that the whole profession would be engulfed in a sea of obloquy. But the reaction happily came, the tide turned, and we can congratulate ourselves and the world that the danger is fast disappearing.

But the cause more important than any or perhaps all of the foregoing for the increase of laboratory skill and the retention of teeth and roots is to be found in the invention of the modern artificial crown and its corollary, the bridge.

This is the distinctive improvement of the past twenty years. Within that period more than one hundred different crowns and bridges have been invented and published.

The result has been two-fold. It has made laboratory skill of more importance and value to the dentist than ever before, and it has arrested the great "slaughter of the innocents" by making the retention of the roots of teeth in the mouth, obligatory.

At various periods the separation of the two branches of practice has been urged by prominent men of each branch, but by these inventions the two branches have been bound together in bonds which seem indissoluble.

The chief drawback to perfection in the past has been the inability of our art, however skillful, to permanently save some teeth. The inherent defects of structure or of surroundings made the best operations but temporary, and these teeth had ultimately to be lost and substitutes applied. Now, after all the worst has happened, the root is still of inestimable value for crowning. This invention seems to place a climax upon our art.

How crude and speculative seem the theories of dental caries which obtained less than a score of years ago when contrasted with the brilliant demonstrations of the renowned American professor of Berlin, founded upon patient and protracted investigation after the most approved modern scientific methods. Though from unavoidable circumstances detained at home, he has shown his interest and co-operation by forwarding a paper. There are many others whose fame is not bounded by their vocation or their country. They are known to the world as scientists and cosmopolitans. However skillful and judicious a dentist may be an operator, this sphere of his usefulness is limited in space and not far-reaching, while these

men are working for mankind at large and for succeeding generations. In view of past victories may we not confidently expect that the etiology of other still obscure diseases, like erosion and pyorrhea, may be solved so that we can either prevent or successfully treat them?

Let us not grudge explorers of the unknown their only recompense, the meed of praise and applause for what they have done and will do for the profession and for humanity.

I am conscious that in this review of the past I have failed to do justice to the subject.

The theory of the bacterial origin of disease, and antisepsis, have engrossed much study and enthusiasm. It seemed that we were on the eve of a solution of all etiology by the isolation of the specific pathogenic germ of every disease, and that to prevent or cure, all that was necessary was to ascertain and administer the proper germicide. Clinical records, however, have failed to sustain the ardent expectations of the more sanguine. The germicide has taken a place subordinate to a strict observance of absolute cleanliness, and we see acknowledged the importance of vis vitæ as a factor in securing immunity from the attacks of bacteria everywhere present.

Light, however, is being shed upon many mysterious bacterial phenomena by a more thorough acquaintance with ptomaines, leucomaines, and the extractives which are toxic and auto-intoxicants. Fortunate practical results have come in the character of a great reform in the care of instruments and the sterilization of everything connected with operative work.

The tendency of prophylaxis to-day is to develop along physiological lines by more special and minute observance of the laws of hygiene. Proper food, its preparation for assimilation, out-door exercise; in a word, rational methods of living, are no more important for the preservation of health than for the building up of tissues throughout the whole body, of such perfectness of structure and function as to be able successfully to resist deleterious attacks.

While I have refrained from specific mention, with two exceptions, of the living exponents of progress, I cannot close without a brief reference to the many upon our Roll of Honor. It would be pleasant to name them, review their lives, and pronounce their eulogy. "They builded better than they knew," and the profession and the world are their debtors. Our duties are less onerous, our paths are more pleasant, our position among men more honorable.

Some of these apostles of progress are known to us only by their

records, but the form, the features, the voice, the presence of some of them are fresh in the memory of many here present.

Under the authority of the trust committed to us by the dental profession of America, we are now assembled and organized as a World's Dental Congress, to advance the interests of dentistry throughout the world. Science and art, twin outgrowths of mentality, should know no boundaries, nor should there be any schools of thought, treasure-houses of knowledge, or gymnasia for training to usefulness, with barriers founded upon race, creed, or nationality, where the health of humanity is involved. As dentists we meet here to-day, brothers of one family, with common interests, mutual respect, and unity of aspiration and expectations. With infinite care and labor the banquet has been prepared, and we are invited to partake of the ripest fruits of professional culture which could be gathered from every quarter. Let us partake joyfully, not for the pleasure of the day alone, but from the consciousness that each feast brings with it the earnest of greater strength to-morrow.

In my official capacity I bid you all welcome—a welcome to every American dentist, who has come with comparative ease, but an especial welcome to those who have traveled long and far, from foreign climes, and over broad seas, bringing with them the choice perfumes and rare products of a different soil from ours, but which are indispensable to the adornment and complete furnishing of the universal banquet of good things for us and for mankind.

RESPONSES BY REPRESENTATIVES OF FOREIGN LANDS.

Following the President's address, the representatives of foreign countries were announced by the Chairman of the Executive Committee. They were welcomed by the President of the Congress and responded as follows:

Dr. George Cunningham, Cambridge, England: Mr. President, Ladies and Gentlemen: Allow me to thank you for this cordial welcome, this "Niagara" of applause with which you have greeted the name of Great Britain and Ireland. To me it is oppressive, because I am not too proud of the representation of my country here to-day. I am not really present as an official representative, and I regret that those of us who were appointed as honorary officers found it necessary to bow our heads to the decision of our representative associations adverse to sending official delegates.

A corporate body is said to have no conscience. And in this instance, owing to most regrettable misunderstandings, and, I must confess it, a certain element of narrow-mindedness, we found our-

selves bound to accept the decision of the societies to which we belong. The development of the individual is in advance of that of the corporate body, and so I assure you that I had numerous requests from many influential members of these societies to express their kindly feeling toward their American confrères, and their regret for the necessity of the official refusal of your kind invitation.

I am perfectly certain that this Congress will be a great success; and as to the absent, I am convinced that the greater loss is theirs more than ours. I thank you heartily for the kind reception of these remarks.

Dr. John E. Greevers, Amsterdam, Holland: Mr. President, Ladies and Gentlemen: I cannot find expression to say to you how much obliged I am for the honor you have conferred upon me in nominating me honorary president from Holland. Please accept my profound thanks. I congratulate you on the prodigious success of this Congress, and of those who have projected this grand universal reunion. It proves once more that Columbia in dentistry, as in other things, leads the world. The Association of Dentists of Holland send their congratulations, and take great interest in this Dental Congress.

Dr. Erich Richter, Berlin, Germany, said: I thank you for the honor conferred on me, and for the words of welcome tendered me. I am not a representative of all Germany, but the German Association of American Graduates in Germany, and the Berlin Dental Association, which unites American with German degrees. Some of you will remember a time not over twenty years ago, when dishonor and disgrace were brought on American dentistry by a number of swindling concerns in this country selling degrees all over Europe. A good many availed themselves of this and disgraced the name of American dentistry abroad. That time has gone by. but it has taken years to convince the authorities in Germany of the difference between an honestly obtained diploma and a spurious license to swindle people under the pretext of being American dentists. As editor of the Dental Journal, I have been fighting for the honor of American dentists in Germany. Now Germany and German dentists have had an awakening from their slumbers by the astounding progress of American dentistry, and the chasm that has excluded American dentistry has been bridged. In behalf of the two societies I represent, I extend a hearty salutation of brotherly love and wishes for the success of the Congress, and the hope that it may promote brotherly feeling the world over. Let us not feel

that when another practitioner comes among us, he is taking our bread and butter off our plates. To protect American dentistry, allow no one to leave its schools who has not thoroughly and diligently pursued the course of study required. The practice in Germany has followed mostly in American footsteps; true, the etiology of caries was discovered in Germany, but the discovery was made by an American, Dr. Wm. D. Miller.

Dr. Otto Zsigmondy, Vienna, Austria, extended his thanks on behalf of the people of Austria, for the invitation extended to that country by the World's Columbiam Dental Congress, and said that his colleagues in Austria took great interest in this Congress, and wished it unlimited success.

Dr. Barriere, of Paris. The honorary officers, confreres, and different sections of the World's Dental Congress and honorary members of the Executive Committee: The Association Generale of Dentists of France, assembled on the 30th day of July, without distinction of members, societies, or schools, send to the officers of the World's Dental Congress their sincere congratulation for their laudable efforts, convinced that this great professional meeting will be very advantageous. They hope for its success and send greetings.

In the name of the Dental School of Paris and also of the Association Generale of Dentists of France, we greet this great American nation. We bring best wishes for the success of this Congress, persuaded in advance of that fact by the celebrity enjoyed by the members of the profession on that side of the Atlantic.

Dr. R. H. Portuondo, of Madrid. I am more than proud to represent to you my country—Spain. I am sorry I am alone, and I cannot express to you what appreciation my fellow-men have towards all of you, not only Americans, but to all of you from all over the world. I cannot help but be proud when I remember the history of the discovery of America and its results. Although I am a Spanish gentleman, I am a graduate of an American college, and I am more than happy to return to this country and see all of our fellow-members. I wish the Congress the highest success. I am sorry I have not been able to make my speech in your own language, in words to thank all these gentlemen for their kindness and the efforts with which they have received us all.

Dr. Antonia Mela, Genoa. Dr. Mela, of Genoa, and Dr. Bowman, of Bologne, were nominated by the council of direction to represent the Odontological Society of Italy, at the International Congress to be held at Chicago. Hoping that all subjects in the dental art will be treated in a manner that will advance and profit our noble specialty, and glad of this grand advancement, our conferers await from the said Commission a report of its work and of the communications received from different countries.

Dr. Caracatsanis, Athens, Greece. Mr. President, Ladies and Gentlemen: I salute you. Allow me, gentlemen of the executive, to thank you for the honor you have conferred on me in making me honorary president from Greece. I congratulate Americans, and hope my own countrymen, who are friends of progress, may always in future take part in such meetings, and may bring to their own country that knowledge which America must be proud of having acquired. The object of our assembling here is for the promotion of a science which can best improve the condition of mankind and promote the progress of health. We heard of an American Congress when at Paris. May the results tend to make life more endurable, and enable us to practice beneficially to our respective countries.

Dr. Paul Adelheim, of Moscow, Russia, sent a telegram welcoming the assembling of the Dental Congress.

Or. J. S. Burrett, Uruguay, South America, said: I am, I think, the only representative of the smallest Republic in the world. I feel in proportion to this, addressing so large a body of learned men. I have watched the progress of your societies for many years, and always envied you the opportunities you have for progress. I have come now to rob you of all your science and all you know, to take out to the benefit of my little country. I thank you for your invitation, and I wish the Congress all success.

Dr. Eben M. Flagg, vice-consul from the United States to Paraguay. At the request of Dr. Walker, I am to make my address in Spanish. I come from one of the smallest countries of the world. I am in no way prepared to make a speech, but think that the size of the welcome you have given me well repays a journey of about eleven thousand miles.

Dr. Alfred Burne, Sydney, New South Wales. I shall confine my remarks to saying that it is a very great pity that the wave of depression which is now passing over the colonies has caused so many to be unable to present themselves here. New South Wales desired that I should be present to show our appreciation of American dentistry, as always shown by the fact that we send our students to America to receive their dental education. In behalf of the

Dental Association of New South Wales, I wish this Congress every success.

Dr. Louis Roussey, Geneva, Switzerland. I am glad to say that there are in my country many who have more knowledge of dentistry and are more eloquent and better able to fulfill my task than I am. But I am here, and thank the president heartily for his kind speech of welcome. In my country the dentists are improving in their art by means brought about by American dentists.

Members of the honorary contingent of Americans in foreign countries were then called, who responded as follows:

Dr. Evans, of Paris, France, sent a letter expressing his regret that he was unable to be present, stating that considerations of partly private and partly public nature had caused him to feel it his duty to remain in Paris; the principal engagement preventing his coming being the desire to see completed, by October next, the Lafayette Home for young ladies who go to Europe to study art. Having seen the Centennial Exhibition at Philadelphia in 1876, he especially desired to see what progress has been made in the meantime in dentistry as in other things. The American dentist is an American product, and there is an especial fitness in holding the Dental Congress on the anniversary of the discovery of America.

- Dr. J. M. Whitney, of Honolulu, Sandwich Islands, being called upon, said as the Sandwich Islands were now so near to being a part of the United States, he did not feel like being classed as representing a foreign country, and expressed a wish that the union might soon come to pass.
- Dr. R. H. Kimball, of Shanghai, China, said: I represent as large a country as has been called upon to speak. We have no association of dentists over there; perhaps eight American dentists are practicing between there and Singapore. I represent Asia only individually. I believe there is no one else who comes from that part of the world to this Congress. I thank you for no minating me as vice-president.

A CERTAIN Chicago clergyman announced from the pulpit that "Our dear sister, Mrs. X., is suffering from a serious and painful illness. She is being cared for by our dear brother, Dr. Dr. G. Let us all pray for her safety."



Original.

NORTH CAROLINA STATE DENTAL SOCIETY.

(CONTINUED FROM LAST ISSUE.)

SECOND DAY—MORNING SESSION.

MAY 24th, 1893.

The President called the meeting to order at nine A. M.

The President stated the unfinished business from yesterday, was Oral Surgery.

Dr. Crawford: I have a local anæsthetic which I have been requested to bring up before the Society and to ask permission to demonstrate. It is presented by Mr. Boyd, of the —— Manufacturing Company.

Dr. Herring: I would like to know if the medicine is a patent, and if the formula is given to the public.

Dr. Crawford: It is patented, the formula not being given. I simply desire to get the sentiment of the Society as to whether patent or secret preparations may be used in the clinics.

On discussion, it was decided unanimously that no secret preparations be allowed in the clinics of this Society.

The President: The next order of business is the report of the Committee on Dental Prophylactics, Dr. J. F. Ramsey, Chairman. No papers were presented.

Dr. Rominger: It does seem to me that this is too important a subject to pass. If there is a subject that ought to claim our careful attention and well expressed opinions it seems that this would be the one. If I understand the meaning of the term, it means the prevention of disease and of abnormal conditions. That subject ought to appeal to us as of the greatest importance. The true dentist never rejoices in a diseased condition of the patient, but our highest purpose eight to be to prevent abnormal conditions. For instance, I suggest cleanliness. I made a little talk on this subject before the Association last year; but simply because it has been mentioned once ought not to close our mouths forever afterwards. There may be persons here who do not sufficiently feel the importance of talking to their patients. We have mentioned before the importance of hygienic surroundings of children and of mothers. I suppose there are no dentists here of any length of practice but

who have directed their attention to that, and so far so good; but suppose I am as wise as Solomon and keep my mouth shut, how is the profession benefited thereby? Suppose I am as old as Methuselah, and do not give the Society my experience, of what benefit am I to the Society? We need to educate our patients in the prevention of disease and in preventing irregularities of the teeth during the reproductive period. I think this comes under the head "Prophylactics." Give attention to the food and instruct the patients along that line. You will be amply rewarded, not only in fees, but in a clear conscience and in the blessings of humanity. Sometimes we need to impress these things, if you please, with a little "brass." It is line upon line and precept upon precept, here a little and there a little, because some people will not learn until you have hammered it into them by repeated effort.

Dr. Turner: I do not like to allow the subject under discussion to pass without saying one or two words. Perhaps it will be repeating what some of the older practitioners understand very clearly; but as Dr. Rominger says, it is no great harm to repeat things to some persons, because they do not always remember them. times a man in practice loses sight of a few points which would be of great advantage to him if reminded of them occasionally. think the most potent thing in preventing decay is a spool of floss silk. It has been my pleasure to know a family in which the mother never allowed her girls to go to bed without passing the silk between their teeth, and as a reward her girls have the most beautiful teeth I know of, with no better health, I suppose, than others raised in We all know that if it were possible to dissimilar circumstances. lodge everything between the teeth at least twice a day, that decay would seldom occur. These small things which can be used without expense to the patient and with but little trouble, would avoid untold suffering and trouble in the future.

Dr. Beadles: Dr. Jones says every man has a hobby, and I suppose every dentist has his. It is a very good thing to have a hobby, provided it is a good one, and it is not a bad plan to change occasionally. My hobby is in this line of prophylactics. This subject was touched upon yesterday in discussing the treatment of teeth of women during gestation. I have had especial occasion to notice in in the last two or three years cases of this kind, and every dentist here knows what trouble he has had with the teeth of women coming to him a few months after the birth of the child. I never make it a habit to volunteer information about dentistry to outside people, but whenever they ask me a question I am willing to give in-

formation. At my boarding house, some years ago, the subject of the care of the teeth was sometimes discussed, and the question of the treatment of the teeth of women arose, and I remembered that in several instances I took occasion to explain the subject to some of the young men, friends of mine; I told them that every man should have his wife's teeth carefully attended to during pregnancy, and gave the reasons. They kept it in mind, and after they were married, as soon as they could find out that their wives were pregnant, they came to me and told me about it, and asked me to look after their teeth. Invariably, under these circumstances, I used cement as a filling.

Some years ago my hobby was gold fillings. I am now on the other side. The treatment is very simple to fill the cavities with cement, and I would recommend the use of prepared chalk and lime water. I let the prepared chalk remain between the teeth during the night, and two or three times a day rinse out the mouth with lime water. I can say that in no case do these women have trouble with their teeth. Not one had toothache. I tell them to come back to me in ten or twelve months. If they want information, I do not hesitate to talk plainly to them. They come back at the proper time, and I then refill the teeth with gold. I would say here that the physicians frequently make a great mistake in not sending the women to the dentist until after the trouble is done. Not one physician in five hundred will do that. They simply overlook the fact of women's teeth altogether.

Dr. Murphy: There is one fact in connection with the treatment of the teeth of ladies during gestation about which I am not entirely satisfied, and that is the local treatment. To my mind it seems that the ground-work belongs to the system, and that there ought to be systematic treatment as well as local. I have risen to ask Dr. Beadles if he has any recommendation to make along that line. It seems to me almost impossible for us to succeed in all cases by the application of local remedies such as have been mentioned, unless we go behind that and reach the trouble through the system.

Dr. Beadles: I am glad the gentleman has brought out that point. The trouble is that the patients will not diet themselves. I recommend oat meal and Graham bread, etc., but I cannot get them to eat such food. I can get them to use lime water and chalk. The family physician should come to our aid in these cases.

Dr. London: I have talked with several physicians on this subject, and they say it is not advisable to supply too much phosphate and bone-producing food as it would result in undue hardening of

the bones of the child, and might prove dangerous to both mother and child.

Dr. Turner: This question of prophylactics, (erosion of the teeth) I know, is not exactly in that line, but the treatment is exactly the same as for women during the period of gestation. It is a subject that has interested me very greatly, and I have looked up the literature in reference to it. Dr. Kells, of New Orleans, recommends some kind of a plate to be placed over the teeth at night, coated with this chalk to prevent erosion. His investigation has proved that the mucus gland immediately over the margin of the gums produces this particular trouble—this dissolution of the tooth substance.

The period of gestation has been a difficult question to deal with in our profession, for many years, and the want of co-operation on the part of physicians has been the principal difficulty; and I can well understand how females, under such circumstances, especially during the first effort in that direction, feel so thoroughly miserable that they do not care if they have any teeth or not, if they could only get rid of that disagreeable green sickness Dr. Moore spoke of vesterday. It is a difficult thing to deal with because many of them are indifferent to the consequences, and that adds a great deal to the difficulties of the situation; but the main point is, if we could get the medical fraternity to co-operate with us, great good could This has been touched upon by Dr. E. L. Hunter; his point is, healthy exercise not only during or previous to that period but during youth. One difficulty is the habit of our people of crowding the schools with children five or six years old, thus depriving them of the privileges of childhood and making grown people of them too soon. That has much to do with the difficulty we have in managing them during the period referred to. Hunter says all other animals go through this same period without losing their teeth. Children ought not to be sent to school too soon, and the mind developed out of proportion to the physical system. This is the position I have taken in my own family.

Dr. Griffith: The period referred to, is, of course, a physiological action, and should not be prescribed for indiscriminately. Inasmuch as it is a physiological action, it is to be presumed that the Creator intended that there should be such a period, and that it should be gone through with. Now, before presuming to prescribe for a condition of that sort one ought to be capable of judging the peculiar diathesis of the patient, and if he is capable of doing that and finds that there is something lacking in that particular system



which will interfere with a healthy result, then he should interfere, of course, and prescribe his prepared chalk and lime water; but to do so for every woman during the period of gestation is unwise.

Dr. E. L. Hunter: If I mistake not the gentleman said it was purely a physiological process. No doubt God so intended it, and in the lower animals it is. With women, however, it is pathological. There is no health in it, else the teeth would not lose their lime salts. They would not be sick; animals do not get sick or nervous. It is not, therefore, physiology but pathology.

Dr. Liverman: Is it not our duty to do as little work as possible for ladies during that period. We should look after them, and if they have any trouble, do what we can to remedy it, doing as little operative dentistry as possible. If we have our patients under control, coming to us at proper periods to see about this; if we take the mother after the child has been born, and if the maiden comes to us regularly, I do not see how we could have much trouble, especially in operative dentistry. One question I want to ask is, what is the change in the dentine during this period? I have had them come to me, and I recognized immediately that there was trouble. Their teeth become soft and sensitive. I would be glad to have some one explain why teeth sometimes ache during this period from no apparent cause, the mouth being in good condition.

Dr. Carr: I see a gentleman here whom I am glad to see at this meeting. I refer to Dr. Thompson, of Georgia. We would be glad to hear from him.

Dr. Thompson: I have just been taking it all in. I suppose we all consider this one of the most important subjects likely to come up, for you find that few people have absolutely clean mouths. At the meeting of the South Carolina Society a young man read a paper on this subject. He stated that in the city of Charleston there were only two or three absolutely clean mouths. He was hissed by the members of the Association. I joined in; but after thinking over the matter I went up and apologized to him, for I do not think he was far wrong. A clean mouth is something you seldom see. of the most important things I have heard any one mention is the proper use of the tooth brush. That is one of my hobbies. an artificial set of teeth and a brush on hand, and I show them how to brush their teeth. I instruct them to brush the lower teeth up and the upper teeth down, and when they brush the gums to rotate and show how the hairs of the brush drop down between the teeth. I, also, like my friend Dr. Turner, recommend the use of floss silk. That is another hobby of mine. I have also had very fine results

from the use of lime water, during the period of gestation, when in the majority of cases the fluids of the mouth are in an acid condition two or three times a week. I do not recommend packing it with lime or soda, but I use it in solution. I tell them how to prepare the water, and have had very fine results. Where a patient in that condition is soon to become a mother, I recommend the use of oat meal and Graham bread—another stand-by. I think it beneficial to them because it supplies the material necessary to them in that condition. I agree with Dr. Beadles in regard to filling the teeth of patients in this condition. I invariably fill with cement in such cases, and afterwards, when the trouble is over, fill them with gold.

Dr. London: I have not heard any one mention the use of tooth picks in this discussion. In my opinion they are as necessary as the tooth brush. If we use our tooth picks we will not need the brush so much. I do not think the tooth pick can be too highly spoken of. The accumulations cannot always be removed with the brush and floss silk is not always available. I always use a quill tooth pick immediately after meals.

Dr. Rominger: We lack medical co-operation. What we need is the help of the physicians. Dr. Hunter says there was something back of all this, and I agree with him. Why is it that with the mother in the human family, it is a pathological condition instead of a physiological condition, as in the lower animals. It is because we do not observe the laws of nature as they are observed by the lower animals. Trace it back and you will find it is the result of violated law. The stock-raiser, in reproducing his stock, always preserves the best. I know a system of that kind would cut a good many of us out, but if anybody objects you may just know that he is a "hit dog." Again you may trace back. You see a girl come into your office, and you see the results of violated law in her teeth, which probably runs back two or three generations, "for the sins of the fathers." etc. While the individual is innocent, there are the remains of violated law, the results of syphilitic poison and the mixing of the scum of the earth. If we could reach that and correct that, in the years to come we would have as perfect teeth as are found in the lower animals.

Dr. Beadles: Dr. Rominger is right. Dr. Hunter struck the keynote. If we could go back three or four generations we might correct these things. Why should my teeth decay? Why does not God make them to last as the rest of the bones? We hear such questions as these frequently asked. I say, God did give you good teeth and that not one of them should decay. It is the broken

laws of nature that cause it. We all remember in history what people the Spartans were. Just as the stock raiser does it, they killed all children who were not strong and healthy; they were the strongest race that ever inhabited the earth—it was the survival of the fittest. A broken law will tell on individuals.

Dr. Carr: I started to say that when I called on my friend Dr. Thompson, I hoped he would answer Dr. Liverman's question. Dr. Liverman asked why the teeth of mothers frequently ached during the gestation period. I suppose it is due to the irritability of the uterus at that time—reflex action.

Dr. Holt of Goldsboro, cures sensitive abraded teeth by the use of a heated burnisher. I am sorry he is not here to answer the question.

Dr. Alexander: I would suggest the use of the burnisher without its being heated, it gives the same relief.

Dr. Griffith: Chloride of zinc will serve the same purpose equally as well as nitrate of silver.

Dr. Turner: It does not prevent decay.

Dr. Boyette: I have had some experience with nitrate of silver. If there is much abrasion, you run too much risk of killing the nerve. Burnishing stops the sensitiveness for a time but it returns when the patient eats acid substances.

Dr. Carr: I would like to state in this connection that at the time of the meeting in Salem eight or nine years ago, on my way back I stopped in Goldsboro and had a tooth burnished. It was a very sensitive tooth; it has not troubled me since. Since that time I have used the treatment in hundreds of cases. I think Dr. Holt first recommended it. You dry the tooth thoroughly, heat your burnisher quite hot and burnish the sensitive part.

Dr. Jones: Has the tooth worn any since?

Dr. Carr: No more than any other.

Dr. Alexander advocates the use of a thin ribbon steel as a toothpick.

Subject passed.

Dr. Turner said that the Capital Club had tendered the Society a reception at the club house at 9:30 that evening, to which all the dentists of the city and all visiting dentists were invited. On motion the invitation was accepted with thanks.

Dr. Turner, being called upon, said: The treatment of a blind abscess has been a problem in our profession for a long time. I know a great many gentlemen who say they treat blind abscesses

and have very few failures, but my own impression is that it is a very difficult thing to do-that is, to treat a large number of cases without a failure. In the first place, I would state that the only positive way of treating a blind abscess is to open it through the alveolar ridge. Now, I do not mean to say this is always advisable, but it is the only certain way; I have had experience in that. patient would say. Doctor, I want you to cure this beyond peradventure—I am willing to submit to any process in reason. I say, very well, the only way to cure that abscess positively, if it is a blind abscess, within a given time, is to penetrate the alveolar process down to the sac. Of course, this is what we call heroic treatment. I will say, however, I have never treated a case and failed where you go through the alveolar process and clip or burr off the ends of the roots. I have never known a failure when this treatment has been pursued. When I have plenty of time and the patient not specially harried, I treat through the tooth and recommend a combination of iodoform, oil cloves and carbolic acid.

Dr. Carr: I have certainly had some experience in the new method of treatment of abscessed teeth within the last two months. and if the Society would like to hear. I will endeavor to tell them what it is. I spoke on yesterday in my paper on pyrozone, sodium and potassium in metallic form in the case of blind abscess Dr. Turner refers to. We will take a tooth of that kind, no matter how much swelling unless ready to burst, put your rubber dam on thoroughly without putting anything else in the cavity, first getting free access to the root, inject some of the five per cent. solution of pyrozone, and immediately you will find the pus boiling out like as if you had poured soda and cream of tartar together, you then let it run out until there is no pus left. To prove that it will cure it, wash the cavity out with an atomizer and this solution of pyrozone and you will find that by simply dressing the cavity with cotton and sealing it up with wax that there will be no pus there on the next day. That has been my experience of two months with With a record of twenty-seven cases within the past two months I have had no trouble. If it will hold out and do what it is claimed to do, and what it has done in my hands, it will revolutionize everything in the treatment of alveolar abscesses.

Dr. Everett moved that Dr. C. C. Sapp be expelled from this Society for improper advertising, in that he has violated Article V., Section 2, of the Code of Ethics.

The Society voted unanimously for expulsion.

Adjourned.



THIRD DAY'S SESSION.

THURSDAY, May 25th, 1893-12 M.

The Society was called to order by the President.

The Secretary read a letter from Dr. Thackston, of Farmville, Va.

Dr. Turner moved that the thanks of the Society be extended to Dr. Thackston for his kind invitation to attend the meeting of the Virginia Society. Carried.

The Secretary read letters from Dr. Holly Smith, of Baltimore; Dr. Freeland, of Baltimore; and Dr. R. M. Johnson.

Dr. Turner: I would suggest, as Chairman of the Board of Examiners, that as there are two members to elect this year, the election be proceeded with.

Dr. E. L. Hunter was elected to succeed himself, and Dr. S. P. Hilliard to succeed Dr. J. H. Durham, retiring.

On motion of Dr. Herring, it was decided to reimburse the committee on conference to the World's Dental Congress for the expense they had been to in getting up a history of dentistry in the State. He said, Dr. Taft, the chairman of the general committee said it was the most complete report received so far, and we all feel proud of the fact that the North Carolina Dental Society at the present time stands ahead of anything else. It was decided to allow \$35.00 to cover this expense. Dr. Turner, chairman of the committee, thanked the Society for their generosity and said he did not expect anything of the kind.

TREASURER'S REPORT.

The auditing committee reported that they had audited the Treasurer's Report and found it correct.

On motion, the Treasurer's Report was received and approved.

Dr. London submitted Dr. Crawford's report as Supervisor of Clinics.

Dr. Turner offered a resolution thanking Dr. Thompson, of Georgia, and Drs. Gingrich and Beadles; of Virginia, for the part they took in the proceedings of the Society. Adopted.

Dr. Everett offered a resolution thanking the Board of Public Buildings and Grounds; also to the S. S. White Dental Manufacturing Company, and the Wilmington Manufacturing Company, and the proprietor of the Yarborough House, and to the various railroads for courtesies extended. Carried.

Dr. Herring: I would like to have the sentiment of the Society in regard to one matter. It has gotten to be a by-word and an eye-

sore to me at least, and I suppose to a great many other members of the Society. I refer to our dental law. About three years ago we had fifteen or sixteen applicants for examination; two years ago twelve or fifteen; last year a few; this year six; next year probably two, and the following year probably none at all. We have tried to get up a favorable case to test our law, but when it comes to the pinch something is wrong. If there is no sentiment back of the law, we can get along just as well without it. I would like to have an expression from the Society in regard to this matter.

Dr. Turner: I would like to say one word in regard to this matter. Of course it probably may be a rather difficult question to manage under the circumstances. The violators of the law seldom come to this point; they generally confine themselves to the rural districts. There is something wrong about this. Two years ago we passed resolutions empowering the President to employ counsel to prosecute every one who was found violating the dental law. There were members present who said they could make out cases, but nothing has been done. Evidently that plan is a failure. In the Virginia Society the Secretary is authorized to prosecute every man he can hear of violating the law. He gets up the testimony and employs counsel to look closely after the matter, so that when a case is reported the man is prosecuted. I would like to hear from Dr. Gingrich, of Virginia, who may be able to give us some information in regard to the manner in which it is conducted in Virginia.

Dr. Gingrich: The law in Virginia says that no one shall be eligible for a license unless he is a graduate of a dental college, and that every practitioner who is practicing without a license is violating the law. Of course, if he has a certificate of registration that antedates the law he can get a license without having graduated. Sometimes the Commonwealth's attorney is a friend of the man violating the law, and does not care to prosecute, and in such cases we have to employ counsel, and we have succeeded thus far in making the man appear before the Board or stop practicing. There is nothing the matter with the law. If a man is qualified, he does not object to go before the Board and be examined. It is the man who has been practicing illegally who objects.

The subject was discussed generally by members, and on motion, the following resolution was adopted:

Resolved, That the members of this Society be required to report cases of illegal practicing to the Chairman of the Board of Dental Examiners, urging him, as an officer of the State, to enforce the law governing the practice of dentistry in North Carolina, and that

the Society appropriate an amount of money sufficient to enable them to do their duty, and that they be required to prosecute when necessary.

Adjourned for dinner.

AFTERNOON SESSION.

In the absence of President Rominger, the Vice-President, Dr. Harper, was installed, and took his seat in the chair as presiding officer.

The following beneficiaries were elected:

Baltimore College of Dental Surgery Edward Burton. Atlanta Dental College Albert Hilliard. Dental Department University of Maryland P. E. Horton.

The question of recommending students as beneficiaries to Dental Colleges was fully discussed, and Dr. Everett submitted the following resolution: That in future this Society take no stock whatever in recommending students as beneficiaries to Dental ColColleges. Carried.

The Vice-President stated that he would not appoint any committees, but would leave that to the President.

Dr. London moved that the Secretary be instructed to send a copy of the dental laws to each member of the Society and to all dentists, sheriffs, clerks, solicitors and superintendents of public instruction. Carried.

Adjourned to meet first Tuesday in May, 1894, at Durham, N. C.

DR. ROBT. L. WATKINS, of New York, has caused himself to be inoculated with the baccillus of consumption, to prove his theory that a healthy person cannot contract the disease unless certain elements are present in the blood.

It has never been fully decided whether the man who picked up the bomb shell that was almost ready to explode, and threw it over the parapet, was a brave man or a fool. We do not know that this applies in this case.

GOVERNMENT MEDICAL SCHOOL.—Secretary Lamont has adopted the recommendation of Surgeon General Sternberg, and ordered the establishment of an army medical school at Washington, for instruction of approved candidates for admission to the medical corps of the army.

GEORGIA STATE DENTAL SOCIETY.

TWENTY-FIFTH ANNUAL MEETING.

(CONTINUED FROM SEPTEMBER NUMBER.)

Dr. H. R. Jewett then offered the following resolution:

Resolved, That each member of the several committees appointed to prepare a paper on the different subjects for discussion before the Convention, shall prepare such paper and forward the same to the Committee on Essays and Voluntary Papers three months before the meeting of the Convention at which they are to be read, and that said committee shall have printed fifty copies of each of the same, and distribute them to members of the Society who may apply for them before the meeting of the Convention.

Dr. H. R. Jewett said that his object in offering this resolution was to get before the Association the subject of essays, and how to secure both the papers and their intelligent discussion. Members hear a paper read, but not having had the subject in mind they are not, as a rule, prepared to discuss it intelligently.

It is true we have an "experience meeting," and derive more or less benefit, and perhaps entertainment from it, but if the drift of the papers to be read was known before hand the subject could be studied in its different aspects and we would be able to get out of the same old routine of daily practice. If the plan I suggest be adopted, a man will study up his subject, knowing that his essay is to be printed and be subjected to deliberate, thoughtful criticism and discussion. In this way we would bring out all there is in a question.

Dr. T. P. Hinman offered a resolution regarding the dropping of the names of delinquents from the roll of membership, which aroused a lively discussion. After being amended several times it was finally laid on the table.

Dr. S. B. Barfield asked for information as to certain papers belonging to the Society that had never been published. After some discussion, Dr. Catching was made responsible for the papers.

The Committee on Necrology reported as follows:

DR. J. J. WORSHAM.

WHEREAS, Since we last met Dr. J. J. Worsham, of Americus, an honorable and worthy member of the Georgia State Dental Society has died—be it

Resolved, That while lamenting the death of so worthy a membe and honorable gentlemen, we extend to the bereaved family our sincere sympathy, and set apart a page on the minutes as a memorial in his honor.

Dr. B. F. Sims, of the committee on investigation of advertising members, reported that he had given special attention to this specific work. He had notified Dr. J. W. Daniels, of Savannah, that charges had been brought against him, and that it was his privilege to be present at this meeting and show cause, if any, why he should not be dropped from the roll of membership. No reply had been received from Dr. Daniels.

The Secretary, by request, read the minutes of the previous meeting relative to this case.

The Chair: What will you do with the report of the committee? Dr. Sims: The matter has run its full course, and the recommendation of the committee is that he be dropped, having had full and ample notification.

On motion of Dr. Barfield, the name of Dr. J. W. Daniels, of Savannah, Ga., was ordered dropped from the roll of membership in the Georgia State Dental Society, and the Secretary instructed to inform him of this action.

Adjourned.

AFTERNOON SESSION.

State Board of Examiners.—J. H. Coyle, Chairman, Thomasville; A. G. Bouton, Savannah; B. H. Catching, Atlanta; H. H. Johnson, Macon; D. D. Atkinson, Brunswick.

Next place of meeting, Tybee Island.

On motion of Dr. H. H. Johnson, the following resolution was unanimously adopted:

Resolved, That this Society hereby tenders its thanks to the retiring members of the Examining Board, who have labored so faith-

fully in this, in many ways, unpleasant duty, for the upbuilding of dentistry in this State.

Dr. B. H. Catching begged to remind the Examining Board that they had entrusted to them the important duty of procuring a charter for the Georgia State Dental Society.

Dr. Carpenter said that this was a very important matter. He had recently been present at the meeting of the Mississippi State Dental Association, when this question was taken up, and a committee appointed and authorized to secure a charter for the Association, from the Attorney General of the State, as soon as it can be accomplished in compliance with the laws of that State.

Dr. S. B. Barfield offered the following:

Resolved, That the thanks of this Society are hereby tendered by a rising vote to Dr. L. D. Carpenter for his untiring and faithful services as Corresponding Secretary of this Society.

The following resolutions were unanimously adopted:

Resolved, That the Georgia State Dental Society hereby tenders its warmest thanks to those big hearted dentists of Atlanta who have worked so hard and liberally for this meeting, and who have gone to so much expense for a banquet and other means for our enjoyment while in this beautiful city.

Resolved further, That our appreciation be shown to the dentists of Atlanta by a rising vote.

The thanks of this Association was also tendered to the Railroads for reduced fare, and to the proprietors of the Kimball House for reduced rates and other favors granted the Association.

On motion, adjourned sine die.

A MOUTH POWDER FOR TEETHING BABIES. — Monti (Wiener klinik, 1892), says that by using the following powder and a soft brush teething can often be made easy.

Dr. W. J. Younger, of San Francisco, will attend the Medical Congress at Rome.

MISCELLANEOUS AND SELECTED.

AN ACT TO REGULATE THE PRACTICE OF DENTISTRY IN ARIZONA.

A SYNOPSIS.

Be it enacted by the Legislative Assembly of the Territory of Arizona:

SECTION 1. That it shall be unlawful for any person, who is not at the time of the passage of this Act, engaged in the practice of dentistry in this Territory, to commence such practice unless such person shall have received a license from the Board of Examiners, as hereinafter provided for.

SEC. 5. It shall be the duty of each person now engaged in the practice of dentistry in this Territory, to within ninety (90) days after the passage of this Act, to send an affidavit to the Secretary of said Board, setting forth his or her name, place of business, post office address, the length of time they have been engaged in the practice of dentistry in the Territory; if a graduate of a dental college, state the name of college, and shall pay to the Treasurer of said Board the sum of Five dollars (\$5) for which they shall receive from said Board a practitioner's certificate.

On failure to comply with the provisions of this section they shall be required to appear before the Board and be examined by said Board.

SEC. 6. It shall be the duty of all persons not holding diplomas, who wish to engage in the practice of dentistry in this Territory, after the passage of this Act, to appear before said Board at a regular meeting and pay to the Treasurer of said board the fee of Twenty five dollars (\$25) not returnable, and stand an examination by said Board in operative and prosthetic dentistry, and all the branches taught in a reputable dental college, and if such applicants pass an examination satisfactory to said Board, said Board shall issue to said applicant a license which will entitle him or her to practice dentistry in this Territory.

SEC. 7. It shall be the duty of all persons holding diplomas, who wish to engage in the practice of dentistry, after the passage of this Act, to present or send to the Secretary at the regular meeting of said Board an affidavit and diploma with fee (\$5) not returnable, and after said Board, being satisfied that said diploma

belongs to said applicant and that it was issued in good faith by a reputable dental college, said Board shall issue to said applicant a certificate of registration for said diploma.

SEC. 8. All persons receiving a certificate to practice under this Act, shall register his or her certificate with the County Recorder of the county in which he or she resides, and shall pay to the County Recorder for such registration, the sum of Two dollars (\$2.)

FOR IRRITABLE AND SWOLLEN GUMS DURING TEETHING.—When the gums are especially painful and the fever is high, great relief will be afforded by an aperient dose of castor oil. Irritation may be reduced almost immediately by rubbing the affected part with the finger, moistened with fresh lemon juice. It smarts a little at first, but subsides in a few minutes. (Eustice Smith.) Vigier has employed the following:

R	Cocaine hydrochlor., gr. ij.
	Tr. Croci,
	Syrup,
M. 8	ig.—Apply several times daily. Not to be swallowed.
If the	ere be much pain, with hardness of the gums, relief (Starr)
	obtained by rubbing them gently at intervals, with
	Tr. camph. comp.,
	Aquæ, f oz. j.
or	- ·
${f R}$	Zinci chlor.,
	Aquæ, f dr. j.
	-Muskett, Treat. Dis. Children.

BURNS.

Pinus Canadensis cannot be too highly recommended as an application to burns, especially when very extensive, the skin being entirely removed. A weak solution in glycerine is squeezed from a sponge over the denuded surface, which is then dressed with some soft ointment, either with or without the Pinus Canadensis. Pain immediately abates, and the healing process is wonderfully rapid. The solution must be freshly applied, as often as the dressings are renewed.

Drs. E. G. Snodgrass and B. C. Hinkley, recently of London, Eng., were at the Congress, accompanied by their wives.

IDENTIFIED BY HIS TEETH.

A case that will probaby become famous in medical jurisprudence recently occurred in Detroit. It was the perfect identification of a body by the teeth. Last July Dr. Eugene Sloman, was accidentally drowned in Omaha, Neb., and the remains were buried here. There was \$25,000 insurance on his life, and the insurance company recently refused to pay, professing to believe that there was no satisfactory proof of Dr Sloman's death. The company asked for the privilege of investigating, which was granted. It was learned that Dr. Sloman had had considerable work done on his teeth in Omaha, and the dentist was brought here. When the remains were exhumed yesterday they were too decomposed for recognition, but the doctors made an exact description of all the marks on the teeth and all the fillings. This description was found to correspond exactly with the entries made by the Omaha dentist in his book at the time he worked on Dr. Sloman's teeth, and the identification was thorough.

THE YANKEE 'CUTENESS IN A FRENCH D. D. S.—A gentleman called on an "American" dentist in Paris (rumor has it that he was born not many miles from the place where he practiced) to have his teeth extracted. The waiting room was crowded; nevertheless, he was soon admitted. In the chair was a lady, evidently about to be narcotized.

"Please step nearer, doctor," said the dentist, and the former, flattered by the title, approached to the chair and looked on. Extraction was effected, and the lady left the room.

"In gratitude, you shall now follow," said the dentist.

"In gratitude? What for?" put in the gentleman.

"Well, you see, there are many patients, especially ladies, who would take gas only in the presence of a physician. I then call any patient from the waiting room, addressing him as doctor, and chip in ten francs extra."

CHRONIC NERVOUS HEADACHE:-

${f R}$	Celerina	•	•	•	•	•	•	•	•		. 6 ounces.
	Tinct. Hyosciamus										. 1 ounce.
	Tinct. Gelsemium										. 1 ounce.

M. Sig.—One teaspoonful taken before going to bed.

THE

Southern Dental Journal and Luminary.

A MONTHLY PUBLICATION

DEVOTED TO THE INTERESTS OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. Johnson, 306 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to Drs. W. R. HOLMES & MASON, 556 Mulberry St., Macon, Ga.

Editorial.

THE COLUMBIAN DENTAL CONGRESS.

The great Congress has assembled, closed its labors, and gone. I believe it is generally conceded by the majority of those in attendance, to have been a success, though many did not have their expectations realized. The numbers in attendance were less than was expected, being about nine hundred and seventy Americans and one hundred and twenty Foreigners. The small attendance was probably attributable to the financial condition of the country more than anything else. Certainly every effort seems to have been made to induce the profession to turn out. At any rate, the Dental editors and Executive Committee did all in their power to work up an interest that would insure a good attendance.

The programme, as arranged, called for a general meeting of the Congress each day at 12 M. At this meeting one paper was to be read each day, which was supposed to be of general interest to all. There was comparatively no opportunity to discuss these papers, time being limited.

Each day as 2:30 P. M., the eight different sections were called to order in eight different rooms, each having a different subject under consideration. The real work of the Congress may be said to have been done by these eight sections. I do not pretend to offer any suggestion by which the work could have been more satis-

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factorily arranged, but certainly sectional meetings are unsatisfactory in many ways. There is a general dissatisfaction in every one's mind that perhaps something of special interest to him is going on in some other room, and yet he would like to attend the section he is listening to, and if he does, there are seven others he will not attend. If he goes from one to the other he gets a confused, disjointed idea of it all, which is unsatisfactory. The clinics were held every morning from 9 A. M. until the general session was called, and consisted largely of the exhibition of patents and inventions for sale. The exhibitors, in some instances, having no knowledge of the profession or its needs. There were a few good and interesting clinics, but as is always the case at such gatherings, no preparation had been made to afford a means of holding the crowds back at a respectable distance, giving the operator elbow room, consequently only a few were able to see at all, while others had to content themselves at being fortunate enough to learn what the man was doing. After the first day this was provided for by posters nailed up near the chairs, which made such information easily obtainable without running any risk of bodily injury.

Night sessions were held and lectures delivered with lantern illustrations, and were of much general interest.

Socially, the Congress may be said to have been a complete success, as it was the occasion of many reunions of bonds of friendship after long separations. The opportunity to meet and know the men who are making the history of our profession was well worth the time and money consumed in attending the meeting, if there was nothing else to be gained, and not a man who was there will be heard to express a regret that he went.

THE Executive Committee of the World's Dental Congress deserves more praise and honor than was accorded them at the meeting or has been given them by the profession of America. They have more than liberally sacrificed both time and money to discharge the duties devolving upon them, and have done a noble work. Some of the members of this committee had to travel over a thousand miles to attend the several meetings during the two or three years, necessitating them being away from their business for over a week at a time. Yet they have done it willingly and without complaint, and as we cannot otherwise compensate them, they deserve the praise of this whole profession for their liberality and many sacrifices.

DR. WARDLAW DEAD.

Such was the bold headline that met our gaze and filled us with sadness, as we perused the Atlanta daily paper of the morning of September 4th. The circumstances of the sad occurrence are such as to render it a most peculiar dispensation. As was generally known Dr. Wardlaw had just been elected Dean and Professor in the Atlanta Dental College, and had gone to that city on the day before for the purpose of entering on his new duties. No one thought for a moment as the Doctor moved along the street on Saturday afternoon, that the angel of death was hovering so near him. and that ere the sun of another day should touch the horizon, his spirit would be beyond its setting. I met him in Chicago the week before while attending the Dental Congress, and while he seemed feeble he was cheerful and bright, and chatted merrily with all about him. In the death of Dr. Wardlaw, the profession in this State sustains an irreparable loss. He had filled many noble and useful positions, always filling them with credit to himself and honor to his profession. He was a man whom everybody loved, gentle, kind. affectionate in his disposition, and yet possessing a strong investigative mind. A circumstance which renders the death of Dr. Wardlaw peculiar and distressing is that he died on the anniversary of his birth. "It seems however like a beautiful providence that such a useful and well rounded life should be terminated on the day that gave it to the world." He was fifty-six years of age, and was in the zenith of his fame and usefulness.

His remains were taken to his home in Augusta, Ga., for interment. Our sincere sympathies go out to the bereaved and sorrowing relatives and friends in Augusta.

WE have just learned that Dr. Geo. W. McElhany has been suddenly stricken with paralysis in his right side. Up to the time of going to press we have been unable to obtain any particulars, but trust he was not so dangerously afflicted as was reported.

It is reported that in Texas a convention has been called to organize a second dental association, which shall not be bound by the code of ethics.

[&]quot;Too MANY men," says an exchange, "try to pull themselves out of trouble with a corkscrew." True enough, but a pull with the forceps does the thing up nicely.



SHORT NEWS AND PERSONAL ITEMS GATHERED AT THE CONGRESS.

Dr. J. J. R. Patrick, of Belleville, Ill., will go to Europe soon.

Dr. Jno. F. Patterson, of Montreaux, Switzerland, attended the Congress.

Dr. Hattie E. Lawrence was chairman of the Woman's Branch of World's Congress Auxiliary.

Dr. Inez Yokum, of Augusta, was in Chicago during the meeting of the Congress.

Dr. Ida Gray, of Cincinnati, Ohio, the first negro woman graduate in dentistry, was at the Congress.

Dr. M. W. Foster, of Baltimore, was called home on account of sickness in his family.

The American members gave an elegant banquet to the Foreign members on Friday evening, which was largely attended.

The Dental Journals of America were well represented at the Congress, many editors being present.

The female end of the profession was pretty well represented at Chicago.

The medal offered for the best popular paper on Dental Hygiene for public distribution, was awarded to Dr. Geo. Cunningham, of Cambridge, England.

Dr. Aryafaa of Helsingfors, Finland, sent to the Executive Committee a beautiful memorial of his work on nasal prosthesis. It will be given to some museum.

Dr. W. D. Miller could not come over but sent a paper and also specimens of hydrarg. salicylic-thymol and sublimate thymol tablets, to be shown after reading his paper.

The American and Southern Dental Associations will probably meet next year in joint session at Old Point Comfort. The Executive Committee of the Southern will decide later on for that society.

The transactions of the Congress will be a valuable book that no practitioner could well afford to miss. They will probably be placed on sale to cover expenses of printing.

The lady members of the Congress, being professional men, were required to pay their five dollars for tickets to the banquet. They were on hand says the "Review," in full force, des cigarettes n'est ce pas', apires le dinner.

Correspondence.

Tucson, Arizona, July 29, 1893.

Dr. H. H. Johnson, Editor "Southern Dental Journal," Macon, Ga.

DEAR DOCTOR:—Enclosed you will find copy of law regulating the practice of dentistry in this Territory. The Board of Dental Examiners holds its next regular meeting, for the examination of applicants for Practitioner's Certificate, in this city, commencing Monday, September 11th, 1893, and continuing three days. Examinations will be both written and clinical and not less than seventy-five per cent. will be required on each examination.

Respectfully yours,

F. A. ODERMATT, Sec'y.

Mr. Editor:—Let me offer tribute to one of the noblest men of the dental profession; one who so recently and suddenly fell asleep. Verily "in the midst of life we are in death." I allude to Dr. W. C. Wardlaw, of Augusta, who had only moved to Atlanta the day before his sudden death. Only this last summer we were informed that his spirit was expected to take its flight. How we watched the dispatches, expecting each morning to hear that he was gone. He lived, went to the Chicago meeting, came back, moved to Atlanta; from here he moved to heaven.

I love to pay tribute to a man like Dr. Wardlaw. I feel that I cannot say too much, only I might say too little. If dentistry, or any other profession ever had a true, faithful and conscientious follower, Dr. Wardlaw was the man. Everything in his character was noble and pure. There was no lurking place about him for anything ungentlemanly or unprofessional. How sadly we miss such men in these days, where the love for money is rampant with its train of evils following. How we shall miss his wise counsel in keeping the course of the dental ship clear of breakers. I dare say, sir, there has never gone from us a man who will be more deeply mourned, I will not say by any class, but by all who knew him. Sitting in my office all alone, realizing that I shall see him no more, I feel sad. I think the hall will be black at our next meeting. Where and when the very waves of the sea will sing his dirge. Ah sir, do you realize what we have lost? How genial he was, how appreciative, how affable, how courteous. I shall not forget, and neither do I wish to, his cordial and firm grasp of my hand when we met at our annual re-unions, with the cheery words, "Catching, how are you old boy? I am so glad to see you." He has passed over the river to rest under the shade of the trees. Shall we meet him there?

B. H. CATCHING.

Atlanta, Ga.

SOCIETIES.

The twenty-third annual meeting of the South Carolina State Dental Association and State Board of Dental Examiners was held at Columbia, on August 8th to 10th.

The following officers were elected for the ensuing year	r:
President, B. J. Quattlebaum,	Winsboro
First Vice President, Theo. Johnston,	Newberry
Second Vice President, H. J. Ray,	
Cor. Secretary, J. P. Anderson,	
Rec. Secretary, B. Rutledge,	
Treasurer, Geo. W. Dick,	Sumter

BOARD OF DENTAL EXAMINERS.

G. F. S. Wright, Pres., Georgetown
J. R. Thompson, Newberry
Geo. W. Dick,
A. C. Strickland, Anderson
L. P. Dotterer, Sec'y,
Next meeting at Charleston, on second Tuesday in May, 1894.
7 7 A

B. RUTLEDGE, Sec'y.

As nearly as can be ascertained there were representatives at the opening of the Congress from Austria, Australia, Canada, Cuba, Spain, Mexico, Hawaii, England, France, Switzerland, Italy, China, Japan, Greece, Norway, Sweden, Russia, Paraguay, Uruguay, Peru, Belgium, Holland, Germany, United States of Columbia.

RUST STAINS.—Rust stains on surgical instruments may be removed, it is claimed, by painting them with a mixture of one part of potassium cyanide, one part of soft soap, two parts of prepared chalk, and enough water to make a paste, and then wiping the instruments and coating them with oil.

Necrology.

ACTION OF THE FACULTY OF THE ATLANTA DENTAL COLLEGE ON THE DEATH OF DR. WM. C. WARDLAW.

WHEREAS, in the providence of God, we have had removed from our midst our beloved brother and fellow practitioner, William C. Wardlaw, M. D., D. D. S., and

WHEREAS, we feel most deeply the loss we sustain in our College work, and that will be felt in the State of Georgia, and throughout the Southern States, and wherever he was known, and,

WHEREAS, we deplore on behalf of the dental profession throughout the United States the loss of this inimitable character, this tender, gentle-natured brother, therefore,

Resolved, that we tender our sincerest sympathy to the bereaved family, and relatives, and particularly to the wife, who must feel more deeply than words can express, this greatest of all bereavements, and to the fatherless children thus deprived of so tender, so true a father.

Resolved, further, that a copy of this preamble and resolution be spread upon the minutes of our College minute book, and that a copy be forwarded to the family of the deceased, and that this be published in the Southern Dental Journal.

WM. CRENSHAW, D. D. S. JNO. S. THOMPSON, D. D. S. H. R. JEWETT, D. D. S. THOS. CRENSHAW, D. D. S. THOS. P. HINMAN, D. D. S.

ELECTRICITY as a reliable obtundent in tooth-drawing is a failure. The shock experienced by a nervous patient while having a tooth extracted is enough, without increasing its intensity by an electric current.

LEAD Poisoning.—A person who has lead poisoning never sweats, and the mucous membrane of the intestines is as dry as the skin.

HYPEREMESIS.—One-half to one drop of oil of cloves in a little water will sometimes be found to control excessive vomiting quite speedily.

Book Notices.

A PRETTY SURPRISE.—A beautifully illustrated and charmingly bound edition of Lengfellow's "Evangeline," recently published, is a pretty surprise for book-lovers. It is in good type, with 45 illustrations by Birket Foster and other eminent artists, is printed on very fine and heavy paper, gilt edges, remarkably handsome cloth binding, combining the delicate colors, blue and white and silver and gold. No illustrated edition has ever before been published at less cost than \$1.50, and that is about what you might "guess" the price of this to be, but it isn't'—it sells for only 19 cents! plus 6 cents for postage, if by mail. This covers only about the actual cost of manufacture by the 100,000, the publisher's object being, not profit, but to get a sample of his book-making intothe hands of the book-loving millions. His publications are not sold by dealers, but only direct; catalogue, 128 pages, a literary curiosity in its way, is sent for a 2-cent stamp, or a 12-page catalogue free. Every home in the land ought to have a copy of this Evangeline, so charmingly beautiful, as a poem, as a collection of artistic illustrations, and as a product of the book-making art. Address, John B. Alden, Publisher, 57 Rose Street, New York.

EDITOR'S SHEET.

LIPPINCOTT'S MAGAZINE FOR JULY, 1893.

Contents.—The Troublesome Lady, (Illustrated), Patience Stapleton; Fannie Kemble at Lennox, C. B. Todd; On the Way, (Illustrated), Julian Hawthorne; Keats and Fanny B——, (Poem), Clifford Lanier; An Old Fashioned View of Fiction, Maurice Francis Egan; Chicago Architecture, (Illustrated), Barr Ferree; Released, (Poem), Mary Isabella Forsyth; The Reprieve of Capitalist Clyve, (Illustrated), (Lippincott's Notable Stories—No. V.), Owen Wister; Rose-Leaves, (Poem), Flavel Scott Mines; What the United States Owes to Italy, Giovanni P. Morosini; "The New Poetry" and Mr. W. E. Henley, Gilbert Parker; A Wild Night on the Amazon, Morgan S. Edmunds; My Castle, (Poem), Lloyd Mifflin; Point vs. Truth, Robert Tinsel; Truth vs. Point, Frederic M. Bird; Certain Points of Style in Writing, Edgar Fawcett; Men of the Day, M. Crofton.

RECENT PATENTS.

A list of recent patents, reported specially for The Southern Dental Journal, by W. E. Aughinbaugh, patent attorney, Washington, D. C. Copies of these patents may be had of the above named attorney at twenty-five cents each.

499,602. Dental Vulcanizer. George B. Snow, Buffalo, N. Y. Filed July 8, 1891.

499,632. Pneumatic Dental Plugger. John H. Heivly, Oil City Pa. Filed October 3, 1892.

500,103. Dental Chair. Daniel A. Nash, Jackson, Miss. Filed October 18, 1892.

500,139. Dental Engine. Roswell De L. King, New York, N. Y. Filed September 24, 1892.

Trade Marks: 23,276. Dental Dams. I. B. Kleinert Rubber Company, New York, N. Y. Filed May 20, 1893. Essential feature, the word "Kleinert" and the representation of a maltese cross.

UNNECESSARILY ALARMED.—Mother—My daughter is tonguetied and I fear her entire future is ruined.

Doctor—Don't worry, madam. There'll be dozens of widowers only too glad to marry her.

CARBOLIC ACID POISONING.—A strong solution of sodium sulphate introduced into the stomach through a tube, if the patient is unable to swallow, is reported to be an efficacious antidote in cases of poisoning by carbolic acid.

THE LONGER an intelligent, progressive dentist is in practice, and the more extensive his observation and experience, the fewer teeth he will extract. The more he strives to save teeth, the better he will succeed.

ENGLISH ILLIBERALITY.—An American physician has been fined in England \$100 for calling himself an M. D. His M. D. was obtained in the United States, and so in the sight of English law was no degree at all.—Lancet-Clinic.

SURGICAL DRESSINGS.—Aseptic and Antiseptic, by Seward W. Williams. Reprinted from Pharmaceutical Record, April 6, 1893.

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VIRGINIA STATE DENTAL ASSOCIATION.

ADDRESS OF PRESIDENT E. P. BEADLES.

AUGUST 8, 1893.

Gentlemen of the Virginia State Dental Association:

I feel highly honored to-day, occupying for a brief period the position as president of this body of representative dentists of Virginia. I accepted the office to which you elected me with considerable trepidation, knowing full well the work that should be done, and feeling my weakness. I think I can honestly say I have done all in my power to make this meeting a success. If I have failed, I can only regret it; if success crown the efforts that have been put forth, the honor must be shared by the able officers you associated with me. Let it be known to you that my heart has been in the work, and that what has been done was done cheerfully.

My address to-day is in the form of a few suggestions, which, it is hoped, may further the interests of our work as associated dentists.

DENTISTS AS BUILDERS.

Let us consider, for a short time, the relationship existing between us, as professional men, and mankind in general; then, the best means for carrying forward the work allotted to us in life.

Americans are prone to consider themselves progressive beyond any people of any age. I am not prepared to dispute this; but, nevertheless, the evolution of man's mind has been exceedingly

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slow. The mind of man is quite the same to-day that is was when the Arcadians ruled the world hundreds of years before Babylon was built, or Abraham called by God to found his chosen race. Cuneiform tablets show us that man was the same being then that we find him now. He accomplished much in these remote ages. only to lose what he had learned, then learn again. In some lines we have never equaled the ancients. I once passed through the Red Sea, not as the Israelites did, but upon the decks of a modern steamship. I gazed upon the lofty top of Mt. Sinai, and pictured in my mind's eye Moses receiving the law from the hands of Jehovah. In a few hours I was in that triumph of modern skill, the Suez Canal, then out into the broad, beautiful Mediterranean Sea. Here was indeed a spot for reflection. Just south of me was Egypt, containing monuments to the skill and learning of a long departed race. Just east of where I stood lay the Holy City, surrounded by so much that is sacred to the Christian believer. Just north was the country of that ever-interesting people, the Greeks, who have had a more direct effect upon the art and literature of the world than any race of any age. Just west was the Eternal City of the Romans, teeming with interest to the student of the history of empires.

On reaching Rome, I stood in the presence of buildings that have defied the storms of twenty-five centuries, stone upon stone, with cement that knows no wearing. With our boasted knowledge have we a building that will stand as long? I walked over the pavements of the once buried city of Pompeii, a city that slept in a tomb beneath the cinders and ashes of Mt. Vesuvius for nearly two thousand years. The traveler can visit this resurrected city and see the remains of a great race. Fragments of statuary and paintings, whose colorings are still fresh, are to be looked upon with a feeling of awe. The question again presents itself, do we in reality equal the ancients?

In the London Museum you are shown bodies that were embalmed before Joseph became a ruler in Egypt, whose features are there, clearly defined, preserved by an art which has never been rediscovered. Who can say that we are more progressive than those who have gone before us?

If the truth were known, there is comparatively little difference in the real ability of men in any age, or at least as far back as history goes. If each man could find the proper channel for his mind, and then devote himself, there would be little difference in men of the same age. The name of some great statesman is sounded

upon the lips of all men; but who can say that he is greater than the humble (?) mechanic who builds an engine, fitting joint to joint, making a monster that drives the ocean steamship against the forces of wind and tide? The general who can successfully lead his armies might be an infant were he required to put together the mechanism of a watch, with its numerous wheels, levers and springs. Hence, I repeat, who can tell who is the greatest?

It has taken eon upon eon to produce the man of to day, and with the experience of so many years we cannot help being great. Each line or branch of study has advanced its own column. Some have been in the lead at one time to fall behind at another. Homer, the Grecian poet, wrote an epic a thousand years before the Christian era which has never been equaled. The pyramids of Egypt were built so far back that we have no history of the date, nor could we duplicate them; but the men who built the pyramids had as many centuries behind them as we have between them and Herodotus in his travels found in some countries that the different branches of medicine were practiced by specialists as they are at this time; but how much they knew we cannot tell. art of medicine, or the relief of human suffering, has occupied the attention of men during all ages, and it seems unreasonable that the discovery of so important a thing as the circulation of the blood should have been only a little more than two hundred and fifty years ago. We can scarcely understand how the simplest disease could have been treated, or the smallest surgical operation performed without a knowledge of the circulation; but this is only another proof of the slow development of the human mind.

No man lives unto himself. We develop slowly in congregation with others; we would not develop at all separately. This rule was true among the ancients; it is equally true to-day in all branches of learning and science as well as of industry. The man who does his duty, never so humble, does not live for naught—he builds for others. What would the structure of our science be but for the early builders of dentistry? It seems impossible that so short a time as one hundred years ago, a little more than a lifetime, scarcely one dentist was known in America. Now there are twenty thousand, a supply greater than the demand.

DEVELOPMENT OF MEDICINE.

Of all the sciences, medicine proper has been among the slowest to reach its present condition. There are, perhaps, good reasons for this. The human body is so complicated, with its nerves, blood-vessels, digestive tract and the organs of the viscera, that it has taken years for the mind to grasp it in its entirety. We have been working in the dark, and are still to a great extent. The propositions of a true science can be demonstrated, but who can demonstrate the action of a drug given internally? It was observed that for certain diseases certain extracts from herbs or certain minerals were beneficial; but no man could tell the why nor the wherefore. Surgery has been upon a different plane. What is here done can be seen with the eve and demonstrated to the understanding. But the time has come when the heretofore more or less occult science of medicine can be placed upon a higher plane. It is known that every disease is carried by a germ, and that the germs of each disease differ in species. With the wonderful aid of the microscope these species can be sought out and classified, as the anatomist does the higher orders of creation, or the botanist does the vegetable kingdom. There are certain drugs which are poisonous to each species of germs, hence when all germs are classified and the specific for each is discovered, medicine then, and not till then, can be called a science. Dentists are contributing no small amount to the attainment of this end. The mouth is obtaining a more important position than it has heretofore held in the estimation of investigators. It is known, as I endeavored to set forth in a paper before this body at our last session, that the mouth acts as an incubator for disease germs. They are taken into the oral cavity from the air, or through the food, in small quantities, and are here propagated to be carried later into the air passages or down the alimentary canal, where disease is set up. This being true, it behooves every dentist to recognize the growing importance of his specialty, and endeavor to add a stone to the structure that is building. Every dentist should be a microscopist and experiment for himself. The time will come when the man who does not understand the use of the microscope will be considered behind in his profession. As it is, not one dentist in ten will undertake the treatment of a single trouble about the mouth beyond an alveolar abscess. If the oral cavity is our specialty we should claim the field.

ASSOCIATED WORK.

I have endeavored to show you that to accomplish much men must work together—our ideas must intermingle. In this rapid age a book is of the past almost before the ink is dry that printed it. Your library is practically valueless. For ages we have been

preparing for this race; now we are running. The man who depends upon his books alone is left far behind and soon becomes a fossil. What, then, is the remedy? Contact of men, contact of brains, interchange of thought. This can be accomplished in no way known to me save through our associations. What you have learned through the year, come up and teach me; what I have learned, I impart to you. There are men who say the association amounts to little, and that they do not gain enough to compensate them for the loss of time. A moment's thought will show such men that they are advancing an argument in favor of attendance. man denies that a good association is very beneficial, and is the best means for building up a profession; hence it is the duty of each to help make the association what they would like to see it. If all of us remain away there cannot even be a poor association. destroy, why not build? First, we must have a common interest: next, we must have harmony; lastly, enthusiasm-and, my word for it, we will have an association that the Mother of States will be proud to own. We have the men and they have the brains to make it such.

OUR MACHINERY.

The methods established by the founders of this Virginia Association are good; but with changed circumstances our methods must change. We cannot remain in one rut too long, or we will sink out of sight. We should be on the alert for anything new that is good. New committees should be made from time to time and new work mapped out. A certain amount of money should be appropriated each year for the purchase of a prize to be awarded for essays upon subjects to be selected. This should be done for the special benefit of the younger members. They should be encouraged to write and to express themselves upon the floor. One of the greatest drawbacks we have is the reluctance with which members enter upon the discussion, even of subjects with which they are thoroughly familiar. I daresay there are members of this association who have not uttered a dozen sentences, in debate, at any one of its meetings. This may be due to modesty, but this is not the right kind of modesty. We owe it to the association and to ourselves to join in the discussions as much as possible, even at the risk of making ourselves obnoxious to some. An old proverb says: "When you have nothing to say, say it," but it is the duty of every member to have something to say. We cannot learn without debate. Discussion searches deep and finds the truth. The ideas of many are more valuable than those of one, no matter how well informed.

We should have appended to our By-Laws and Code of Ethics a formula for the installation of officers. This can be made very simple, but it will relieve the outgoing president of much embarrassment. The duties of each officer should be defined, and the same impressed upon the newly elected. Doubtless, some of our officers in the past have not known their duties, judging by the manner in which they have sometimes been performed.

The association should select an essayist each year. This should be an office of honor, and filled only by our best men. His essay should be written upon some special and interesting subject, which would be entertaining as well as instructive.

There should be a standing committee on necrology. This I consider very important. This committee should prepare memorials upon the death of any member. These memorials should be presented to the association and preserved in a record prepared for this purpose; this record to be carefully preserved among the archives of our organization. Why should the memories of our best men be allowed to fade away? Those who come after us will be glad to look up such biographies. Thus will be preserved the history of dentistry in our State.

CLINICS.

We admit that this most important part of our machinery has not been managed as well as it might have been, and I think principally because we impose too much work upon a few. Heretofore the chairman of the Executive Committee has had this, with all of his other duties, to attend to. There should be a Supervisor of Clinics, to be elected, or appointed by the president. It should be his duty to see to it that we have good clinics. Other associations have adopted this plan with success. Many of our men come here solely for the clinical instruction. While I do not believe this should be the case, they should not be disappointed.

THE PUBLIC.

It has been said that if the public realized the importance of caring for the teeth that no dentist, as many as there are, would be idle. We know too well how much ignorance there is in regard to this subject, even in this enlightened age. The word "doctor" means teacher. It is our duty to teach the public. What are we doing in this direction? We discuss it among ourselves and lament

the condition: but, are we trying to correct the evil? How many women know the effect of pregnancy upon the teeth? Or, at least, they are ignorant of the fact that something may be done to counteract this effect. At present the family physician is more responsible The latter does not come in contact with the than the dentist. patient until the harm is done. The physician generally knows of her condition early, and could easily prescribe for the teeth or send her to a dentist, who should know what to do. How can we inform the public of these facts? The dentist cannot print a circular and distribute it upon his own responsibility—our Code of Ethics stands in the way. It would seem, as has been already suggested by some writer, that this work might be done by a committee appointed by the association. A strong committee it should be, with judgment and discretion. This committee should write, and cause to be written, articles for the newspapers, also short pamphlets. This committee should pass upon all matter for publication, and such matter should be sent out under the auspices of the Virginia State Dental Association. Thus, no special dentist can be advertised, as the name of no dentist will appear. Each member of this organization should be furnished with as many copies of pamphlets as he may desire for distribution. The newspaper is the greatest educator of the age. It is used by organizations of every kind to disseminate their doctrines. No great advance is made in medicine or surgery that is not sounded around the globe through the Why should not we have this advantage? And why should the public not have this benefit? Should a man light a candle and put it under a bushel? Advertising, personal advertising, should not be thought of. But the good that dentistry can do should be known all over the land. We build for comfort, for health and for happiness.

OUR MEMBERSHIP.

There are over two hundred and fifty dentists in the State of Virginia. There are less than a hundred before me. What can be the cause for this? Simply, that the dental profession needs education itself. The hand of every dentist is against every other. Is this to build? Rather to destroy. How can we get them? By first preparing the feast—by making our meetings indispensable. When a man once comes here let him feel that he cannot afford to remain at home. Our transactions should be printed in full, and, for a time at least, every dentist in the State should have a copy. There are a few who will continue to remain away, but no personal

pique nor a trivial thing will keep a true and honorable dentist from attending the annual meeting of his State Association.

CODE OF ETHICS.

It is lamentably true that few, if any, of our text-books touch upon this subject, and certain it is that few professors in dental colleges ever endeavor even to explain to their students the word "ethics" as applied to a profession. If every student could be a born gentleman no teaching of the "code" would be necessary. But this is not the case, and gentlemanly qualities must be taught if we are to have a gentlemanly profession. In reality it does not pay a dentist to advertise as we now understand that word. A careful man will inquire "who is the best dentist?" and will go to the man best recommended, notwithstanding the half-column "card" of the other fellow. If I comprehend the meaning of the term "code of ethics," it is simply the course pursued by a gentleman in the practice of his profession. There may exist some restrictions which should be removed. Some of our prominent men are discussing this question at present; but, whatever their decision may be, it is certain that no dentist, consistent with the standing of his profession, can resort to the promiscuous advertising done by men who have no higher thought than a sordid desire for the dollar-men who use printer's ink to supplement what they lack in skill. The wise will recognize such advertising as an admission of this fact. We have some such men in this association. We can do better without them. They dishonor themselves and they dishonor us.

OUR JOURNALS.

No progressive dentist who intends to build can do without this stone for his structure. Next in importance to the society come the dental journals. They keep us abreast of what is new. They are able to discover and condemn what is evil. Let me here put in a plea for our own "Southern." Under its new management it is now one of the best to be had, and Southern dentists should feel a pride in its support. It will pay you to take half a dozen dental journals. We must use the best material in the mental work-shop, or some other man will build better than we.

OUR EXAMINING BOARD.

No step that has been taken for the upbuilding of dentistry is more important nor pregnant with more good to the profession and to the public than that which brought into existence the Board of

Dental Examiners. We have only to look around us to realize this Colleges of ill-repute are springing up in all directions. in Alabama has recently come to my knowledge which has been started by a land company. Doubtless, each "graduate" will be presented with a block of stock or a corner lot in a boom town. Of what account is a law that only demands a diploma from a "reputable college?" There is a movement on foot to establish an Interstate Examining Board. This may be a step forward, as a certificate from such a board, by some change in the laws, would entitle a man to practice in any State without further examination. right must prevail. Those who were most heartily opposed to dental legislation, after they "pass," are most heartily in favor of it. Let us see to it that our board is kept in good working condition, and this can only be assured through the efforts of the association. Every dentist should feel it is duty to assist the president of the board in ferreting out all illegal practitioners, and, if necessary, we should draw freely upon our treasury for carrying on this work. In union there is strength. We have led the nations in dentistry, but recently Great Britain has passed a law shutting out the last one of the American schools. No graduate of an American college can practice in England. Can you tell why this is?

FEES.

Did you ever underbid another dentist? Let us be one thing or another. If we propose to enter the commercial lists, give all a fair chance, but do not take advantage of those who are honestly endeavoring to build a profession worthy the name, and work cheaper than an honest man can afford. The best dental work is worth more than the average good dentist gets for it. If you advertise low fees the English would call you "cheap and nawsty," which is doubtless true. A Cheap John dentist! How repugnant. It is not cheap-low-priced dental work is the most costly thing in which the public can deal. Some day they will find this out, and the cheap dentist will find himself without patronage. A man should be honest above all things. God knows, I would quit the profession to day if I could not do better work than I see in the mouths of innocent, confiding people almost every day in the year. They have paid their money and got nothing. A man should know whether he understands his business. Some men practice for years and still go on deceiving the public and apparently deceiving themselves, never once realizing that they have gotten hold of the wrong thing.

Gentlemen of the Virginia State Dental Association, I may have wearied you, but I have said what I wanted to say, imperfectly though it be. We need some reform. I have endeavored to outline some changes which I believe would be for our good. I should like to see a great association in our State. I should like to see an honest, capable set of men in our profession all over the land, a profession of which no man need feel ashamed. We are progressing; we are building. There are men before me to-day who have labored to this end for years. All honor to them. They deserve our gratitude and admiration. They have been untiring and unselfish. Let us not criticise. Each of us has a duty to perform—let us perform it.

FRACTURE OF THE JAW.*

BY DR. R. Y. HENLEY, DANVILLE, VA.

Fracture of the jaw is usually the result of violence, though fracture of the neck of the bone has in a few instances in very old persons resulted from a violent fit of coughing.

Blows on the jaw from falling, fighting or the kick of a horse are some of the most common causes.

The unskilful use of the key or forceps in the extraction of teeth has produced complete fracture of the jaw, which generally from that cause occurs in the ramus of the inferior maxilla. Gunshot wounds of the face often produce most terrible injuries of the jaw, by splintering or removing large portions of it. Fractures of the inferior maxilla are remarkable from the fact that they are so frequently compound, while the skin is rarely ruptured except in gunshot wounds. The fibrous tissue of the gums, being very inelastic, tears easily when the bone is broken across, which enables the saliva and air to come in contact with the fractured surfaces.

Fractures of the ramus, the condyle or coronoid process are, however, too deeply seated for the injury to effect the membrane of the mouth. Fractures may occur at various points in the lower jaw, but the body of the bone is the portion most frequently injured—the ramus from its position and coverings being much less liable to injury except from extreme violence.

^{*} Read before the Virginia State Dental Society, August 8th, 1893.

The coronoid process is sometimes broken off obliquely, and the neck of the jaw is often broken on one or both sides of the bone in cases of extreme violence.

In the body of the jaw the fracture occurs most frequently in the region of the canine tooth, on account of the greater depth of the socket and the consequent weakness of the bone at that point. It may, however, occur at any other point.

The line of fracture, except at the symphysis, is usually oblique. In double fractures of the body of the jaw, one being on each side of the median line, the displacement is necessarily greater, as the muscles attached to the chin have a tendency to draw the central loose piece downward and backward toward the hyoid bone, while both latteral pieces are drawn forward and outward. Reduction of a fracture of the neck of the jaw, where complete displacement is produced, can only be accomplished by acting upon the condyle and the jaw at the same time. The finger carried far back in the mouth should throw the condyle out, while the jaw is brought into its proper relation with the other hand. The fragments must then be pressed firmly together and against the glenoid cavity by means of a bandage.

Fracture of the coronoid process rarely occurs, and it is claimed by some when it does occur osseous union never takes place, but I am free to say that the claim will not hold good except in a few cases of very old persons.

Considerable inflammation frequently follows fracture, even of a simple nature, especially if it has been neglected for some hours. The face becomes swollen and tissues beneath the chin infiltrated with serum, which is sometimes converted into pus, giving rise to troubesome abscesses.

Wounds of the face rarely accompany fracture of the jaw except, as I have stated, in gunshot wounds, and when they do occur the wounds are treated on ordinary principles, and are of little consequence so far as the fracture is concerned, except that they interfere with the application of the necessary retentive apparatus or bandage. Hemorrhage, beyond that caused by the laceration of the gum, is rarely met with. The elasticity of the inferior dental artery enables it to stretch sufficiently, in a majority of cases, to avoid rupture. Should the artery be ruptured the hemorrhage can usually be controlled by digital compression of the caroted artery for two or three hours.

Dislocation and fracture of the teeth is frequently met with, the former being the direct result of a blow, or the consequence of a fracture running through the socket, and the latter the result of direct violence. In the region of the molars it is often caused by the indirect force of the neighboring teeth, and frequently by the teeth being driven against those of the upper jaw. Where the fracture passes through the socket the tooth may fall between the edges of the bone, and thus seriously interfere with the proper reduction of the fracture. This fact should always be borne in mind when a tooth is missing and difficulty is experienced in setting the fracture.

In fracture of the lower jaw in children (a very rare accident), where it happens to involve the cavity in which a permanent tooth is being developed, exfoliation of the tooth, with a portion of the alveolus, is almost certain to ensue. Paralysis and neuralgia from injury to the inferior dental nerve may be the immediate result of the accident, or be caused at a later period by pressure. In a majority of cases the nerve sustains little or no injury, which is due to the fact that a greater number of fractures occur between the symphysis and the inferior dental foramen through which the nerve passes.

Abscess frequently occurs in severe injuries of the jaw, the matter pointing below the bone. This condition is as often caused by undue pressure of the retentive apparatus as by the injury. A certain amount of pus usually finds its way into the mouth through the lacerated gums in all cases of severe fracture, but the exit is usually sufficient to prevent the occurrence of abscess within the mouth. In neglected cases of fracture the abscess may be connected with necrosis, and may point at some distance down the neck, and the fistulous opening remain for several months or even years.

Salivary fistula may result from a compound fracture of the inferior maxilla or from an abscess bursting externally in case of a simple fracture—the treatment of which is the same as that arising from other causes, such as necrosis, etc.

Necrosis of the alveolar process frequently follows fracture, to a limited extent, without producing any permanent deformity; but it sometimes effects the body of the bone to such an extent that its removal is necessary and very great deformity follows.

Dislocation of the jaw sometimes accompanies fracture, but is exceedingly rare, from the fact that fracture tends to prevent it. Where the displacement of the fragments of the bone has been great it is sometimes impossible to keep them in proper position, and the result is an irregular union of the bone, which may interfere with its functions in after life. This condition is more liable to occur in

eases of double fracture, where the central portion of the jaw is very much displaced by the muscles attached to it.

Fractures of the lower maxilla usually unite with great rapidity and certainty, in spite of the difficulty of keeping the fragments in proper position. Non-union may be simply the result of neglect of treatment, and union may take place readily as soon as the parts are placed under favorable circumstances. Necrosis at the point of fracture is one of the most prominent causes of non-union, and for that reason we find that fractures from gunshot wounds are frequently difficult to unite. The amount of inconvenience from an ununited fracture varies according to the position of the false joint. In the ramus it seems to give very little, if any, inconvenience—the new joint performing the function of the temporo-maxillary articulation. When a false joint occurs in the body of the bone it often interferes with mastication very seriously.

The treatment of fracture of the lower jaw after the reduction of any displacement is generally of a simple nature, but cases sometimes arise in which the most carefully adapted mechanical appliances fail to effect a good union. The apparatus employed to hold the fractured parts in position may be divided into two classes, viz.: those which are applied externally, and those which are applied in the oral cavity. It is sometimes necessary to combine the two methods in extreme cases. The simplest form of external apparatus consists of the ordinary four-tailed bandage. When the condyle is displaced by the action of the pterygoidus externus reduction must be effected by drawing the jaw horizontally forward, and at the same time pushing the condyle outward with the finger introduced far back into the mouth. Reduction being accomplished, the jaw must be pressed upward and backward to fix the condyle in the glenoid cavity, after which a bandage may be applied. When delay is due to superficial necrosis, time for exfoliation to take place is all that is required. When the necrosis is extensive, or the loss of substance great, it is not desirable to produce union between the fragments, as an unsightly deformity will be induced, which can be avoided by the use of apparatus to retain the parts in their normal positions.

Fractures of the superior maxilla are not nearly so common as those of the inferior, but their results are more serious, from the fact that the patient has to undergo greater violence.

Fractures of the upper jaw may be produced by a fall on the face and striking on the molar bone, which often poduces vertical fracture through the orbitar process of the superior maxilla. Direct

blows on the bone are the most common causes of fracture. Fracture extending into the antrum often gives rise to suppuration in that cavity, but it is not a necessary consequence.

The nasal process of the superior maxilla has been fractured by blows which have also driven in the nasal bone, and in these cases emphysema of the cellular tissue of the face is not uncommon, which is best checked by the application of collodion. A complication of this form of fracture, which has been met with, is permanent obstruction of the nasal duct, leading to subsequent trouble-some epiphora.

Separation of the maxilla in the median suture has been seen in cases of fatal injury to the face. Recovery from this condition is unusual. The teeth of the upper jaw may be broken or dislocated as in fracture of the lower jaw; but, if they are merely loosened, should never be removed, as they will become firmly attached.

Splintering of the bone is much more common in the upper than in the lower jaw. Hemorrhage is much more frequent and copious in fractures of the upper than those of the lower jaw, because of the great vascularity of the parts. Hemorrhage frequently comes from rupture of the internal maxillary artery, and may be immediately fatal. Secondary hemorrhage is a frequent occurrence.

Injury to the infra-orbital nerve and its branches often ensues in cases of severe fracture and comminution of the superior maxilla, and consequent numbnesss or modification of sensation will be the result. Serious brain symptoms may ensue when the fracture runs back to the sphenoid bone, as the fissure may extend to the cranium. This trouble is especially liable to occur when the whole of the septum narium is driven back with the jaw.

Fractures of the upper jaw require but little treatment as compared with the lower, for the reason that the part is naturally so much more fixed than that of the lower jaw, and consequently the less difficulty in keeping the fragments in position.

Hemorrhage, which is sometimes copious, should be arrested by cold, the application of styptics, and, as a last resort, the actual cautery.

When, as is frequently the case, the soft tissues of the face are lacerated, and the hemorrhage arises from them, the bleeding vessels should be secured with ligatures in the ordinary manner. It is not best to remove the fragments of the upper jaw bone, for the reason that the parts are vascular, and will nearly always unite readily.

"THE SIXTH-YEAR MOLAR."

THE PRIZE ESSAY AT THE VIRGINIA STATE DENTAL ASSOCIATION.

BY P. P. STARKE, D. D. S., RICHMOND, VA.

The value of the sixth-year molar is variously regarded by dentists and patients—some esteeming its loss a matter of little concern; some considering its value only as the difference between the cost of extraction and filling, giving preference to that which is cheaper, without a thought of any other; some computing its loss as a mathematical problem, such as one from thirty-two leaves thirty one, which is no bad showing when compared with the average loss; some believing its value to be associated with many other interests, and, consequently, should be cared for both its own intrinsic worth and other members associated, while there are some fools, who might be denominated ultra-extremists, who carry science and its theories so far that they would at any time destroy the body to save the tooth, the latter unfortunate class being composed almost exclusively of either those who are freshly graduated and have not tested their theories, or those would-be practitioners amongst a questionably cultivated set, who are readily duped by any form of charlatanism which makes a pretense to superiority. Between these two extremes I propose to discuss the six-year molar, regarding its loss, not with that brutal indifference so often observed among the vulgar and ignorant on the one side, and the excessive importance of its preservation, under whatsoever conditions, seen among the foolishly educated and over-sensitive class, on the other.

For my own part, I should advocate the preservation of the sixth-year molar, whether I were able to give a specific reason or not, but would maintain such position upon the general conviction that the Almighty has created no part of our being without the wisdom of some special purpose, and that the function of any one part extends beyond itself and is more or less associated with the whole being.

If I were called upon to point out definitely the functions of the hair, I do not know that I could point out definitely one wise purpose it serves beyond appearance, unless it be to keep the head warm in winter, which advantage is more than offset by keeping it too hot in summer, as some of you in attendance at present can, doubtless, testify. Yet, my conviction is unshaken that be it the

hair, the thyroid gland, or some other obscure part, whose functions may or may not be known, the wisdom of its preservation is beyond question.

The study of the sixth year molar may be made for general information on tooth origin, formation, functions, etc., or for special information as to its own individuality and peculiarities apart from the rest. Believing that the object of the papers requested on this subject is to bring out the distinctive character of this tooth and its points of difference from others, the efforts of this paper shall be toward that end.

The origin of the sixth-year molar, like that of the rest of the teeth, is from the outer covering of the oral cavity, or epithelium, corresponding with the skin outside of this cavity. But, unlike the anterior teeth, the prolongation of epithelium, which sinks into the jaw and forms the sixth-year molar, gives off later a branch which forms the twelfth-year molar, and from the latter yet another branch which forms the so-called wisdom tooth. Thus, it will be seen that while each prolongation of epithelium anterior to the sixth-year molar forms only one tooth that from which this tooth is derived is the source of origin of three, and these three the largest in the arch. This is a peculiarity not associated with the formation of the other teeth to which I would call special attention, desiring to point out some of the results of this peculiarity.

In the first place, the second and third molars in their origin being offshoots from the first, it is very evident that there can be no second or third molars except there be a first. In the anterior teeth one or another will sometimes be found missing without the loss of adjoining ones, but from the very nature of the origin of the sixth-year molar it could not fail to develop without precluding the emption of the second and third. Sometimes it seems as if the powers of formation of this epithelial prolongation gave out before reaching the third molar, as is very often witnessed by the absence of the wisdom tooth. But it is not likely that anyone ever observed a wisdom tooth which had no sixth-year molar as its predecessor. For my own part. I never did. nor can I conceive of the formation of either second or third molars without the first after a study of their origin. Therefore, to be brief, I might say, no sixth-year molar, no molars at all. But there is connected with this tooth another striking feature associated with its origin, namely, absence of irregularity. Though any of the anterior teeth are sometimes found out of position, as may also be the case with the deno sapiential, probably, this tooth was never seen out of its regular

position except as the result of violence, and, according to my observation, it has never been out of position except from injury subsequent to its eruption. The absence of its irregularity is readily understood when we recollect that it, having no temporary predecessor to retard its eruption or change its course, and having the posterior part of the jaw to pick its course, invariably comes out in a normal position. The situation also of this tooth makes it the keystone of the arch, its loss in the adult tending more to cause irregularity than the sacrifice of any other. Being in the center of the arch, its anterior surface forming the dividing line on the alveolus between its anterior and posterior halves, it locks the anterior and posterior teeth in position. While, from its location. it is most active in preserving the regularity of the rest of the teeth, its arrangement in that location makes it most active in the process of mastication. This will be understood when we note that in the upper jaw the first molar is the point at which the jaw teeth curve upward and backward, and the front curve upward and forward, while in the lower jaw the first molar is the lowest point in the curve. Thus, when food is placed in the mouth it naturally seeks the lowest point or hollow in the curve. which corresponds with the first molar of the lower jaw, where it is masticated by the upper first molar which points downward farthest in the upper jaw, fitting and crushing the food in such These teeth, therefore, when in their normal position depression. from their arrangement, are forced to do the greater part of mastication, and may be termed the upper and nether millstones of the mouth. The food, chewed upon either the front teeth or second and third molars, can be kept in position and masticated only by more or less effort which is not natural, the position which it naturally takes when left to itself being in the depression in the lower arch over the first molar, as mentioned before, where it may be crushed by its superior antagonist. The preservation of this tooth therefore, is more to be desired from the standpoint of intrinsic value than any other. Notwithstanding that this is the most valuable of the dental organs, there are times when its extraction is indicated, which will be pointed out further on.

The form of this tooth is, also, said to differ from that of the rest of the molars, but as it has no special bearing upon any new thought desired to be brought out in this paper it need not be dwelt upon.

With the single exception of irregularity, the troubles to which this tooth is liable are the same as for the others, with the difference that it is more liable to such troubles, and, consequently, its treat-

ment has to be modified with this fact kept in mind. As an example, take caries, to which all the teeth are liable, but none so much so as the sixth-year molar. Evidently, there is some cause why it should decay more readily than any other of the dental organs, and it becomes our duty to search out the causes, so that we may act intelligently in its treatment. In the study of its structure, composition and the changes which it undergoes at different periods of life we may get the key to the problem. It is generally acknowledged that early in life, soon after its eruption, it consists much more largely of animal matter than at a later period, when the earthy material has been deposited in larger quantities. consequently, disorganization, which may be started soon after its eruption, is liable to prove much more destructive than if started While it is highly important that this tooth should be preserved for the sake of itself as well as those associated with it. if decay begins very early, say between the ages of six and ten years. and reaches the nerve it is much better to extract at once than aitempt at such an early age the destruction of its nerve and root filling. There are several reasons why it is better at this age to extract than fill as a dead tooth. In the first place, at this time the animal matter in the tubuli of crown and roots is in very large proportion and more liable to putrefactive changes than later. when the earthy deposits reduce the size of the tubuli. In the second place, the tissues of the jaw, like other parts of the body, in the young are more susceptible to irritation than later in life. an abscess might be produced by an irritating body which might readily be tolerated at a later period. In the third place, if, from the condition of this tooth when it comes under observation, it is seen that it can be preserved for only a few years, it would be best to extract immediately, which operation would give the second and third molars an opportunity to come forward during and after eruption, and fill the space caused by the loss of the first. it may be best, as a rule, to save the natural teeth for only a few years, if they cannot be saved longer, the rule will not hold good for this, the most valuable of all teeth, at the early age and under the conditions indicated. Patients who present themselves to me between the ages of six and ten years with the six-year molars unfavorable toward permanent salvation I extract. In this manner. such teeth as cannot be saved except for, possibly, a few years are removed from the danger of causing an irregular position of others. which would result if extracted subsequently. To sum it up, I would say that when extraction is unavoidable, it is better to extract at ten than at eighteen years of age. After such an operation the second and third molars will generally fill the space very satisfactorily, which would not be the case if the first molar were extracted about the latter year, with, most likely, an abscess to contend with up to that time. But, where the nerves remain alive, the density of the tooth may be hastened by the use of oxyphosphate filling material in the cavities to be filled in preference to amalgam until such time as the tooth by increasing density from the deposition of lime salts, assisted by the hardening influence of the oxyphosphate material, becomes hard enough for metallic fillings.

It is a fact that has received due recognition that an oxyphosphate filling will either hasten the increase of density of a tooth or increase the density through some virtue of its own.

So far, I have never learned whether the oxyphosphate filling hastens the deposition of lime salts in the tubuli of a tooth or of itself acts upon the tubuli of the dentine in immediate contact. But, whatsoever be the mode of action, it has a most desirable effect in hardening the dentine of a tooth in which it is placed. I often use it, intending it to remain for only a year or two, for the sole purpose of hardening the tooth, so that the metallic filling purposed to be used after that length of time may be employed with greater prospects of permanency. Attention should be called to the first molar as a butt for bridge work, when the choice lies between it and adjoining roots, for the following reasons:

1st. It is not inclined to change its position in the jaw so readily as the other molars, whose tendency is to work forward or in the front ones to change with slight pressure. 2d. That it is naturally the point at which the strain in mastication falls, thus becoming the butt proper for work of this kind. As all objects have a center of balance and a point upon which strain falls more heavily than elsewhere, so have the jaws, and this center of strain corresponds with the location of the first molars. For this reason gold crowns for the first molars should be thicker than elsewhere on account of both wear and strain being greater. Very thin gold crowns here are contrary to reason and the necessities of the case.

There are some other observations in connection with the first molar, but as those mentioned are some of its peculiarities in which it differs markedly from the other teeth, and, as the object of this paper is to bring out its distinctive characteristics, I hope that through a discussion by other members we may all gain new ideas on the sixth-year molar.

DEVELOPMENT OF THE HUMAN TOOTH.*

BY DR. E. P. BEADLES.

The histology of the teeth is too voluminous a subject for full treatment in a short paper, as this must necessarily be; hence, I have selected a small portion, viz.: The periods of calcification, the formation of dentine, and the formation of enamel. These will be treated on the surface merely. A few salient points will be brought out, which we can readily carry in our minds.

There is a wide field for prophylactic treatment in connection with the development of the teeth of the human race, which the future will demand of the dental profession to enter. It is well known that each succeeding generation brings with it more inferior teeth than was known in the preceding. We have in our chairs now children younger than ever before. Now, there must be a cause for this, and this cause it devolves upon us to discover. Having found it, as an honest profession we will endeavor to remove it.

If I understand the object of these papers before your association, they are intended to put briefly and simply what the books tell us in detail about the subjects we discuss.

Dentine, as is universally admitted, is an offspring of connective tissue produced by the papilla, which is a formation of embryonal tissue crowded with medullary capsules. It begins to appear about the end of the second and beginning of the third month of intrauterine life, at a time when the extremity of the epithilial cord has begun to flatten and assume a cup-shape. The cavity of this cup is filled with the papilla which sends prolongations along the outer wall of the cup, the future sack of the tooth.

At the beginning of the fifth month the odontoblasts are noticed. These are not direct dentine formers, but are provisional formations from which arise medullary corpuscles, and these are changed into the basis-substance of the dentine. In a word, we see then that the dentine from the first is a formation of connective tissue, first visible in the shape of a knob-like protuberance termed the papilla. Second, the papilla is composed of medullary (or marrow-like, or tumor-like) tissue, holding an irregular myxomatus network, originally scanty, but later on freely supplied with arteries, veins and capillaries. Third, shortly before the formation of

^{*} Read before the Virginia State Dental Association, August 8, 1893.

dentine (in the fifth month of fœtal life) there appear at the periphery of the papilla elongated corpuscles, known as odontoblasts. From the odontoblasts are sent off the offshoots, which are dentine fibers. Fourth, the medullary corpuscles are transformed into basis-substance, which is the seat of the deposit of lime-salts. Next comes the development of the cementum, which I omit, except to say that it develops after birth, when the root and its dentine have been fully formed. At birth the crowns only of the temporary teeth are present, there being no trace of the roots

The epithelial cord of the enamel organ is a formation of the epiblast. In the same manner as the nerve centers (brain and spinal cord) are products of the epiblast, greatly changing their character in the further course of development, the epithelial cord gives rise to the myxomatus tissue of the enamel organ. The epithelial cord arises from a furrow, lined with epithelium, about the sixth week of intra-uterine life, and grows obliquely downward into the connective tissue, which latter produces the papilla about the third feetal month.

After the formation of the enamel organ the epithelial cord is dissolved into clusters, which are partly transformed into fibrous connective tissue. The remnants of the external epithelium, as well as those of the epithelial cord, very probably furnish the material for the increase of the enamel after the original enamel organ has been exhausted.

The epithelial cord of the temporary tooth furnishes a lateral offshoot for the formation of the permanent tooth. The papilla of the latter appear about the seventh month of intra-uterine life.

I now take up the periods of calcification, which are important.

After the temporary teeth are developed and have served their purpose they are then removed by resorption of their roots, and their places taken by the permanent set. A good deal has been said about the cause of this resorption and many opinions expressed. My own is that they are taken up by the same process that any foreign body is absorbed by the system and discarded. When the permanent tooth comes in contact with the end of the temporary

permanent tooth comes in contact with the end of the temporary root the nerve is severed and the tooth becomes a foreign body, there being little supply from the periosteum. When the permanent tooth fails to develop these teeth sometimes remain in the mouth for a number of years.

In the microscopical examination of dense animal structure, or such tissues as are made up of lime-salts, it is seen that they, like, vegetable structures, have periods of growth and rest, which are illustrated by concentric layers or zonal shades, and that, while these conditions are normal, they are both intensified and modified by the genius presiding over the function of nutrition.

For the temporary teeth, we know that by the seventh week of intra-uterine life, and when the embryo is less than one and onequarter inches in length, preparation is made for the development of the enamel germ, followed in the ninth week by the dentine germ. In the seventeenth week we find the border line between the enamel and dentine germs receiving depositions of the salts of lime. By the nineteenth week the same process has reached the molars, and from this period until the fortieth week, or time of birth, the growth of the tooth-germs and their calcification progress simultaneously. At birth the calcification of the crowns of the eight incisors is quite complete; the four cuspids and four first molars are fully two-thirds calcified, and the four temporary second molars have their crowns for half their length solidified by the At the end of the following three months the infant same process. enters into the critical period of its life, and from a glance at the condition of the twenty deciduous teeth and their progressive developmental change, it is reasonable indeed to assume that the conditions have not a little to do with the various abnormal systemic disturbances to which the child is subject at this time.

As early as the fifteenth week of embryonic life preparation is made for the development of the four first permanent molars, and following close upon these in the sixteenth week is the inflection giving rise to the enamel organ for the twenty anterior teeth, and from this period until birth the germs for twenty-four of the permanent teeth are passing through their several progressive stages preparatory to receiving the salts of lime. At birth, then, the child has not only the deciduous teeth largely advanced toward calcification, but has germs of twenty-four permanent teeth, in twelve of which calcification commences the first year. The germ of the second molar makes its appearance the third month, and that of the third molar the third year after birth.

The permanent teeth during the periods of calcification are very sensitive to morbid changes of the system, and any abnormal condition, even though of short duration, is almost sure to leave its mark upon the crowns of the teeth.

The four first permanent molars and the eight incisors receive during the first year a portion of their lime-salts, and by the end of the third year twenty-four of the thirty-two teeth are in this process of development. The fifth year the second permanent molars commence calcifying. The fact that the third molars are developed during the period of childhood and youth, when there is such a demand for all substances which go to make up the body, is one reason why these teeth are generally lacking in development; hence, they are often of little value.

It will be seen from the above how important it is for us to carry in our minds these periods of calcification, if we are to do anything in the way of prophylactic treatment.

DENTAL PROPHYLAXIS.*

BY DR. J. P. SMITH.

Perhaps no branch in the range of dental science of equal importance with the one now under consideration has received so little attention.

This subject, like the treatment of diseases of the oral cavity, depends very much on the cause of the various diseases, for how can we prevent that of which we do not know the cause? For the past twenty five years we believe none of the professions have made such rapid strides in advancement as the one of which we are representatives, but we fear that our attention has been too much in one direction. It seems too much our object to repair the loss which has already occurred, rather than to prevent the occurrence of such loss.

Dr. Miller tells us in his paper, "Bacteriology a Part of the Dental Curriculum," that it has been proven beyond the possibility of contradiction that, with one single exception—that of irregularity—diseases of the mouth are caused by bacteria of some kind or other.

Now, since the discovery of bacteria as cause of disease, there have been such radical changes and wonderful improvement in the treatment of certain maladies in our sister profession.

Is it not time that we were claiming our share of the discovery? And a rich share no doubt awaits the careful investigation of this subject, and I believe that the benefit derived from this source would come in to help the cause of prophylaxis. This subject doubly asserts its importance when we think of what a small per

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cent. of the people who are able to avail themselves of the means now offered for the preservation of the teeth, namely, the service of a good dentist.

What we need is some means which can be more generally applied—some way to reach all classes in every nook and corner.

We are so often reminded of the necessity of an effort in this direction by this question asked by our patients: "Why is it that people lose their teeth at the present time so much younger than they did before dentistry reached the position of a profession?" And, truly, why is it? Is it that the treatment of to day is not as intelligent? We think nay. But, that we are not keeping pace in prophylactic measures with the predisposing cause of disease.

We will consider in detail one of the most important diseases which we are called upon to treat—that of caries. The most plausible theory of the predisposing cause of caries is by the use of finely bolted flours, thereby robbing the system of the lime-salts necessary for the formation of perfectly formed dentine. Is there a way by which we could supply the needed element in the system? As to the exciting cause of decay, Miller told us that it was from bacteria of some kind. I am not prepared to offer any opposition to his theory, but I believe there must be some lodgment of decomposing food for the proliferation these microbes to begin in before the tooth is ever affected.

With these few words as to cause of decay, the prophylactic measures are obvious—that of cleanliness. Therefore, we should urge upon our patients the importance of the persistent use of the brush and silk floss.

HOLMES (A. M.) ON THE PREPARATION OF CANADA BALSAM FOR CAVITY LINING.

I have found that when cavities are painted with Canada balsam cut in chloroform it not only serves as a retainer, but the chloroform evaporating, there is left a hard, impervious coating between the filling and the tooth, which effectually closes the mouths of the dentinal tubuli, and forms a non-conductive layer that very materially modifies shocks from thermal changes. In preparing it, evaporate the balsam to the point of dryness, and then dissolve it in enough of chloroform to reduce it to the proper consistency. Do not allow the Canada balsam solution to coat the cavity quite to the edges of the walls.—*Practitioner*.

PROCEEDINGS OF

THE VIRGINIA STATE DENTAL ASSOCIATION.

The twenty-fourth annual session of the Virginia State Dental Association met in the club room of Albemarle Hotel, Charlottesville, Va., on Tuesday, August 8, 1893.

The morning session was devoted mainly to preparatory work for the future proceedings of the session. The Executive Committee reported that ample provision had been made by correspondence with some of the very best operators for clinics in every department of our science, but that unforeseen circumstances would prevent several from attending who had been most confidently expected.

The association then adjourned to meet at 3:30 P. M., at which time the president, Dr. E. P. Beadles, of Danville, called the association to order, and the exercises were opened with prayer by Rev. Dr. Petrie, of Charlottesville.

Judge Duke, also of Charlottesville, delivered an address of welcome, stating that when invited to welcome the association to Charlottesville he was glad that his time had at last come to have his revenge upon a set of men who had given him so much trouble. And yet, in the midst of his preparation late last evening, his son set up a howl with an aching molar, and all desire for revenge flew from his mind and heart, and his only wish was for a dentist.

His city always extended a welcome to professional bodies, but especially was the art and science of dentistry welcomed as one of the essentials to human happiness. His earnest desire was to see a chair of dentistry allied with that of medicine in the great university of our State. His belief was, when he looked around and saw the character of men composing the great dental profession, that they would not be satisfied with less than having the next fifty years to mark an era of progress as great, if not greater, than that of the past fifty years.

Dr. W. W. H. Thackston, "our noblest Roman of them all," was expected to have been present to have responded, but had been detained at home.

Dr. Everett, of Raleigh, N. C., was welcomed and invited to a privileged seat.

After attending to much routine business, Dr. R. Y. Henley, from the Committee on Physiology, Anatomy and Oral Surgery, read a paper on "Fracture of the Jaw." (See page 494.)

Dr. Moore reported Dr. Gibson's method of reduction of fracture as follows: Taking an impression with soft plaster, then breaking his model at point of fracture, making plates to antagonize correctly in the mouth and then bandaging.

Dr. Norris recited a case of fracture from a pistol shot and his mode of reduction.

Dr. Gingrich described the treatment of a case of a gunshot wound in which the lower part of jaw was gone, only the lingual plate of the process remaining between the lateral and second molar. This plate of process was soon lost, and the parts were only held by the soft tissues. He asked was the repair osseous or cartilaginous?

Dr. Campbell replied that it was cartilaginous.

Dr. Henley reported having seen a case in which the inferior maxilla had been removed entirely some years previous; fibrocartilaginous tissue had formed, and made a base for a most serviceable plate to rest upon.

Dr. Beadles described a method of setting a dislocated jaw, in which the operator's chin is placed on the occipital bone of patient, bringing the head on operator's chest, then with pressure of thumbs on molar teeth and pressure at symphysis the jaw could easily be thrown into proper position.

Dr. Chewning presented complete models of a case of compound fracture, which, after having stood three weeks with all the soft tissues in a most horrible condition, had been most successfully reduced and with the most perfect antagonism.

The association then adjourned to the next morning. At 10 o'clock President Beadles called the association to order, and the privileges of the floor were extended to Drs. Wyche, of Oxford, and Carr, of Tarboro, N. C.

The Committee on Therapeutics and Pathology reported through Dr. T. H. Parramore, who read his paper.

Dr. Carr was requested to report his experience with pyrozone, which he did, stating that his experience with it was most satisfactory. It would do what was claimed for it. A 3 per cent. solution was a most valuable occasional mouth wash. The 5 per cent. ethereal solution was of course stronger and excellent for topical application, especially in pyorrhea alveolaris, often giving almost immediate relief. He thought the 25 per cent. ethereal solution to be the best caustic known. When applied on cotton in the pockets for treatment of pyorrhea the pus would often be seen to rush forth and salivary calculus softened. Afterward spray the

mouth with the 3 per cent. solution; spray again the next day, and in a few days use the 25 per cent. solution, as before described. The rubber dam was of course to be used where it was desired to bleach the teeth. He had also found the 3 per cent. solution to be most excellent for post nasal catarrh.

Dr. Gingrich had seen a case in which the tooth was apparently healthy and ready for filling, but an application of pyrozone caused pus to flow.

Dr. Cowardin said his experience with peroxid of hydrogen was not at all satisfactory. He preferred either carbolic acid or creosote. He cited a case of a lateral incisor with secondary abscess, filled the root at once, opened the abscess externally, and applied tent with carbolic acid, and the result was a rapid healing.

Dr. Campbell thought that the failures of peroxid of hydrogen were often, because it was such an unstable preparation.

Dr. Carr on this account much preferred pyrozone, as it was reliable and an infallible detector of pus, would always penetrate the tubuli and cleanse them.

Dr. Henley objected to carbolic acid on account of its tendency to coagulate the albumen.

Dr. Parramore thought the trouble with carbolic acid was because of the difficulty in getting it to the seat of trouble. After a lengthy discussion on the subject of pulp stones, the subject was passed for the present and the association then elected quite a number of new members.

The Committee on Operative Dentistry was permitted to discuss their subject in lieu of a written report.

Dr. Thompson exhibited Blair's vaporizer, which he found very serviceable when desiring to use the vapor of iodoform for pulpless and abscessed teeth.

Dr. Cowardin stated his objection to the Herbst method of root filling. He thought the root should be filled to apex, and for this purpose he preferred gutta percha.

Dr. Moore preferred cones of tin, because, if necessary, they could be removed.

Quite a lengthy discussion followed as to the painless removal of nerves, ligating and the separation of teeth, and the best mode of using cocain for this purpose.

Dr. Parramore described his method of making an amalgam crown, which consisted of fitting a collar of platina around the root and having a platina post, and then filling with amalgam.

Dr. Gingrich preferred the Howe post, as the platina would not amalgamate.

Dr. Cowardin's preference was for the platina.

The association then adjourned to meet at 3:30 o'clock.

AFTERNOON SESSION.

At the appointed hour the president, Dr. Beadles, called the association to order, and, at the request of the association, he read his address on "Dentists as Builders" (see page 485), which was much appreciated and enjoyed, and referred to a committee to report.

On the call for the Report from the Committee on Histology, Microscopy and Chemistry, the president stated that at almost the last hour he had ascertained that the committee would fail to make a report, and, rather than there should be no report, he had hastily prepared a paper on the "Development of the Human Tooth," which he then read. (See page 504.)

Dr. Johnston congratulated the associated on such a meritorious paper being presented, and also upon the spirit that prompted the president to prepare the paper rather than that there should be no report on that subject.

The paper was discussed, Dr. Gingrich presenting the idea in the way of an interrogation if the crowding together of the permanent teeth in the arch during the eruption of the temporary teeth could cause the irritation of first dentition.

The Committee on Dental Prophylaxis, through Dr. J. T. Smith, presented their report. (See paper, page 507.)

Dr. Cowardin did not believe that we as dentists could do much before birth to prevent decay. After birth we must look to the way in which our children live. He found that children who used much sweets were the most subject to defective teeth, and, as a preventive, he thought that dentifrices, with a fair proportion of salyciliated soda, were a great auxiliary for all classes. He was anxious for the M. D.'s to persuade their patients not to use fermentative substances. He recited cases within his practice wherein children had been denied the use of sweets, and their teeth were wonderfully improved.

Dr. Steel thought that he could substantiate the above, and recited the cases of confectioners within his practice who had lost much tooth substance. If children must eat sweets, let it be pure, and not the terra alba of the confectioner.

Dr. Moore contrasted our patients with the English, Dr.

Cowardin had spoken so favorably of, stating that our climate and the hot bread used acted as deleteriously on the teeth as the sugar.

Dr. Steel said our habits were not as good as the English. We ate too hurriedly, especially bread, which should be thoroughly incorporated with saliva.

The new feature in the association of the "Query Box" was here introduced, and quite a length of time was spent in giving answers to the many questions deposited in the box.

Prof. P. B. Barringer, of the University of Virginia, was introduced to the association, and, in accordance with promise, gave a most interesting talk on the "Digestive Tract." (See next issue.) The professor was plied with many questions, which he cheerfully answered.

The association then adjourned to meet at 8:30 P. M.

EVENING SESSION.

After the association was called to order the president requested Drs. Wyche and Carr, of North Carolina, and Prof. Barringer, of the University, to act as the committee to award the prize of a gold medal given by the president, Dr. Beadles, for the best essay on "The Sixth-Year Molar." After the reading of the essays the committee retired, and in due time returned, reporting that they had made the award to Dr. P. P. Starke, of Richmond, Va. (See essay on page 499.

The association then proceeded to select the next place of meeting, which resulted in the selection of Old Point Comfort, and on motion the Southern Dental Association and the American Dental Association were requested to hold their next annual session at the same place, and the president was requested to convey to them in person our wishes.

At the election of officers, Dr. H. W. Campbell, of Suffolk, was elected president.

- R. Y. Henley, Danville, first vice-president.
- C. L. Steel, Richmond, second vice-president.
- W. A. Jones, Waynesboro, third vice-president.
- J. F. Thompson, Fredericksburg, treasurer.
- J. Hall Moore, Richmond, corresponding secretary.
- G. F. Keesee, Richmond, recording secretary.
- T. H. Parramore, Hampton; W. H. Gingrich, Norfolk; W. E. Norris, Charlottesville, Executive Committee.

The association then adjourned to meet for clinics the next morning.

At the morning session clinics were conducted most profitably and successfully by Drs. Carr, Gingrich, Cowardin and Moss.

After the clinics, Dr. C. L. Steel read his paper on "Some Notes from Practice on Crown and Bridge Work." The paper was discussed, others giving their mode of working, and the subject passed.

In the absence of the much beloved Dr. W. W. H. Thackston, the secretary read his paper on the "Harris Memorial," which will be published at a fitting season some time in 1894. Its many recommendations were considered valuable suggestions, and referred to a committee to report at next annual meeting.

Dr. Cowardin, in his report on Dental Education and Literature, mentioned that a new dental department had been organized and connected with the College of Physicians and Surgeons in Richmond, spoke of its merits, and asked the hearty support and confidence of Southern dentists, as he pledged that it should be up to the full standard.

The association then, after much routine work, adjourned to hold its next session at Old Point Comfort at time to be determined by the Executive Committee.

SOUTHERN DENTAL ASSOCIATION—TWENTY-FOURTH ANNUAL MEETING.

The business meeting of the Southern Dental Association was held in Kindergarten Hall, Chicago, August 11. Dr. B Holly Smith, president of the association, in the chair, called the meeting to order at 10:30 A. M.

On motion, the reading of minutes of last meeting was omitted. The report of the Executive Committee being called for, Dr. White, chairman, made the following report:

"We, the Executive Committee, have examined the books of the treasurer and secretary, and find they have been properly kept and are correct in every detail."

He suggested that it was the opinion of the Executive Committee that owing to the fact that we were not going to have a regular meeting, but as it was understood that the Columbian Dental Congress should absorb the Southern, they thought best to adjourn until another year, allowing the same officers to hold over until then.

He further reported that charges had been brought against Dr. E. B. Marshall, of Rome, Ga., for unprofessional advertising. The secretary was requested to read the following from his home paper:

1. "Dr. Marshall's Anchor Plate for artificial teeth is the most satisfactory denture known. Spoken of in the highest terms by the most eminent dentists. Worn with comfort, without covering the roof of the mouth. No injury to adjoining teeth. Remains immovable in masticating food. Can be easily removed and replaced at will.

"This denture is covered by letters patent. Made only in North Georgia by Dr. E. B. Marshall. Office 302 Broad street, Rome, Ga."

2. "Rome has become distinguished among the dental profession by the invention of Dr. E. B. Marshall. The Anchor Plate has been patented by the doctor, and patients are coming from a distance to get the benefit of it. It is the best denture known, and held firmly in place without clasps and can be removed and replaced at will."

On motion, a committee of three was appointed to correspond with Dr. Marshall in reference to the matter, and report at next meeting. Committee—Drs. Gordon White, N. A. Williams and S. W. Foster.

On motion of Dr. McKellops, the dues for this year were remitted.

On motion of Dr. White, the secretary and treasurer were appointed a committee to revise the roll of members.

The committee of three to revise the Constitution and By-Laws, appointed at Lookout Mountain, was continued. Committee—Drs. H. E. Beach, E. S. Chisholm, B. H. Catchings.

On motion of Dr. Marshall, of Mississippi, the Executive Committee was appointed to select a place for the next annual meeting and to report within the next six months.

There being no further business, the meeting adjourned till the next annual meeting.

HAS BROUGHT SUIT.

Dr. J. Stedman, of La Porte, Indiana, has commenced suit, by bill in equity, for an injunction and account of damages and profits, against Dr. H. DePew, a member of the Dental Protective Association, filed June 17th, in the United States Circuit Court for the Northern District of Illinois, at Chicago.

"SEMPER PARATUS."

BY EDWARD H. BOWNE, M. D.

A physician (1) who doesn't believe in the efficacy of drugs intelligently prescribed, has no more moral right to practice medicine than a minister has the right to preach the gospel who doesn't believe in the teachings and spiritual inspiration of the bible, the book of books.

LOW DENTISTRY.

A man who will fill, for well-to-do people, half a dozen or more teeth for a dollar, is a disgrace to the dental profession and a miserable enemy to all practitioners who practice dentistry and dental surgery as a profession. Such a man not only belittles a noble profession, but is a constant menace to the prosperity of all honorable and well-meaning members of the profession. Such a man degrades dentistry to a lower level than cobbling at the bench. We know of at least one practitioner—and a graduate at that—who fills teeth sometimes (oftentimes) as low as ten and twenty cents per filling, and will lump an extracting case and extract a dozen teeth for a dollar. His practice is large and office elegantly equipped and furnished.

Albeit the modern dentist makes a specialty of conserving the natural teeth. New Jersey's dental law, paradoxical as it may appear, has this remarkable clause: "Provided nothing in this act shall prevent any person from extracting teeth." At least one physycian has taken advantage of this most remarkable feature of the New Jersey law, and, armed with the latest forceps and a halfpound bottle of cocain compound solution, he is making a specialty of local anæsthetics, and extracting hundreds of teeth at fees from ten cents to thirty-five cents per tooth. Provided with a horse and buggy, he travels miles in every direction from his office, and teeth of all descriptions—good, bad and indifferent—fall victims to his rapacious forceps. As an extra inducement he informs his patients that, being a physician, he extracts their teeth for about one-half the fees charged by dentists. Several of his patients have come under our observation, with gums in the most horrible condition, caused by the extra large amount of carbolic acid in the solution he uses and the careless manner in which it is injected. necrosis also follows in the wake of his hypodermic needle.

Rocky Hill and Kingston, N. J.

THE

Southern Dental Journal and Luminary.

A MONTHLY PUBLICATION

DEVOTED TO THE INTERESTS OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. JOHNSON, 306 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to Drs. W. R. HOLMES & MASON, 556 Mulberry St., Macon, Ga.

Editorial.

THE APPOINTMENT OF DENTAL SURGEONS IN STATE LUNATIC ASYLUMS.

Much has been said regarding the appointment of dental surgeons for the army and navy, and considerable effort has been expended by the profession to accomplish the object, which is a just and legal one, and will, as the world becomes enlightened and educated to the importance of the dental profession, ultimately prevail.

But the caption of this article is a question which addresses itself to us at home, and which affects a poor, unfortunate class of humanity who are unable to help themselves or to make known intelligently from whence their sufferings emanate. Knowing and realizing the intimate relationship and sympathy existing between the teeth and nervous system, is it not strange that the importance of such appointments has not long before this made itself manifest to the profession and those in charge of these institutions? One cause of this, perhaps, is the fact that these institutions are officered largely by physicians who are either ignorant of the importance of this great subject, or through a kind of professional jealousy at what they claim as an encroachment on the domain of their territory, refuse to admit what is clearly proven to their minds. Time will eradicate all these petty jealousies as dentistry continues to assert itself and grow in importance, and the general practitioners

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of medicine will gradually withdraw and yield the claim to the field of our specialty and acknowledge its importance and necessity.

Resolutions to this end were passed by the Georgia State Dental Society at its last session, and a committee of five appointed to confer with the trustees of the State Asylum and urge them to recommend such appropriation and appointment. Considerable effort has been made by this committee to impress the trustees with the importance of the subject, and it is probable that they may make the recommendation to the Legislature at its next session. If we fail to accomplish it at this time, it is a matter of too great importance to abandon without any further effort. Each State Dental Society should take the matter up and get the press of the country interested in its accomplishment The press is the power that moulds the minds of the public, and whatever the public demand they are apt to receive. The question is not of small moment. From a humane standpoint, it affects the comfort of thousands of unfortunates in every State. The benefit to be derived in treating these mental diseases must be great. Who, understanding the nature of reflex nervous action arising from lesions of ganglious of the terminal branches of the maxillary nerves, could doubt that beneficial results in very many cases must follow, where the services of a competent dental surgeon is engaged in connection with medical treatment? It might be interesting to the general profession to know the opinion of many leading men on this subject.

I therefore append the following expressions of opinion on the subject, kindly obtained and furnished us by Dr. E. P. Beadles:

"Prof. Wilbur F. Litch, professor of materia medica and therapeutics in the Pennsylvania Dental College, says: 'I have repeatedly operated for private patients in the insane department of the Pennsylvania Hospital, and there can be no question as to the necessity for the services of a skilful dentist in all such institutions. Mental diseases cannot fail to be aggravated by pathological conditions of the teeth, and the trained dentist alone is qualified to diagnosticate and treat such ailments."

"Prof. J. Foster Flagg, professor of dental pathology and therapeutics in the Philadelphia Dental College, says: 'I have had ample opportunity to demonstrate the great amount of prompt relief from suffering and the prevention of much discomfort by the treatment and filling of the teeth of lunatics. For quite a number of years I had a large experience with many of the most violent and obtuse patients at Kirkbride's Asylum in West Philadelphia, and the results, from the humanitarian standpoint, were remarkable

and most gratifying. The care of the teeth of the insane is certainly a most useful and comfort giving as well as interesting mission."

"W. W. H. Thackston, M. D., D. D. S., now the oldest living graduate of dentistry in the world, and who has been in continuous practice for over fifty years, says: 'So far as I have examined the jaws and teeth of idiots and imbeciles, I have almost invariably found the maxillary bones more or less abnormal and the teeth of poor quality, decaying early on account of utter neglect of attention and cleanliness. No doubt the poor creatures who are inmates of our lunatic asylums suffer untold agonies, which could be relieved by skilful dental operations. I hope that our Legislatures will see to it that this boon will be brought to this class heretofore neglected, but whose misfortune appeals to the tenderest sympathy of our natures.'"

"Dr. T. Chandler, dean of the dental school of Harvard University, says: 'I heartily sympathize with this move, and often thought of the need of competent supervision in such institutions by dental practitioners instead of the perfunctory work of the ordinary physician."

"Prof. J. Taft, dean of the dental department of the University of Michigan, says: 'This subject should have the consideration of our entire profession. I have known cases of epilepsy that have been cured or markedly improved by the removal of diseased teeth. This, however, is not exactly in the line of your inquiry, but interesting nevertheless."

"Albert P. Brubaker, A. M., M. D., D. D. S., in his article on 'Reflex Neurosis Associated with Dental Pathology,' in volume III of the American System of Dental Surgery, relates a number of cases of insanity caused by lesions of the teeth. The following is a sample (page 500): 'A lady aged 40, married, family history good, good physique, but of nervous temperament, had always been well until a year ago, when she began to show considerable mental aberration attended with periods of great depression of spirits. This condition lasted almost continuously for one year. From time to time during the year she complained of severe radiating pains in the right side of her face and head. Localized tenderness of the inferior right molar induced me to open into the pulp chamber. It was found that the pulp was devitalized and contained a number of nodules. Upon the removal of this source of irritation the melancholic condition disappeared entirely.'"

"Prof. W. H. Morgan, dean of Vanderbilt University, says: In years past I had considerable practice among the inmates of

the Central Asylum of Tennessee. Considered as a disease of the nervous system there is much that is not understood about what is termed as reflex nervous action. We have it in infancy, when the deciduous teeth are making their appearance, and from inability to control this action is due the large proportion of infantile mortality during the second summer. We have this reflex action at any age, and is frequently exerted on the brain as the result of irritation and inflammation of the nerves of the teeth.' Dr. Morgan has had a case in which the patient, a raving maniac, was cured by extracting offending teeth.''

We have given these expressions from eminent men and undoubted authority to impress the fact upon the minds of the reading men of the profession that this question is of serious consequence and deserves more than passing notice.

FALLEN FROM GRACE.

"The following preamble and resolution were adopted by the Faculty of the Medical Department University of Tennessee, Nashville Medical College, at a meeting held at the office of Drs. Duncan and Paul F. Eve, September 2, 1893:

"WHEREAS, It appears that one E. F. Rose, of Dukedom, Tenn., having complied with the requirements for graduation, received the degree of M. D. from the Medical Department, University of Tennessee, Nashville Medical College, in 1892; and

"WHEREAS, It has been made known and positively proven to the satisfaction of this faculty that the said Dr. Rose has so far forgotten and ignored the principles of honorable medicine as to enter into all manner of advertising schemes to obtain practice, in violation of the code and professional decency, etc., therefore be it

"Resolved, That we, the Faculty of the Medical Department, University of Tennessee, Nashville Medical College, censure and condemn the conduct of the said E. F. Rose as unprofessional and injurious to the college from which he graduated to practice medicine, and that the dean be instructed to strike his name from the records as an alumnus, and declare him beyond the role of professional recognition."

The above action of the Medical Department University of Tennessee is carrying out to some extent the ideas I have advanced and contended for for some years, and is the only solution, if any therebe, to the quack advertising question.

The graduate who sinks so far below professional decency as to become a blatant advertiser ought not only to have his name stricken from the records as an alumnus, but he should have his diploma taken from him and his title revoked. When a diploma is issued some such agreement should be entered into between the college issuing it and the recipient. That it is his to have and to hold with all the rights, titles and privileges to which it entitles him, so long as his actions as a professional gentleman reflect credit on himself and his alma mater. But whenever he deliberately and premeditatively plans and pursues a course that will bring disgrace to his profession and cast a reflection on the college whose diploma he holds, on receipt of such legal information the articles of agreement should be declared broken and his title and diploma forfeited.

Some such decisive measures are becoming imperative if the honor and dignity of the profession shall be maintained.

In this issue we present some valuable and entertaining papers, read before the Virginia State Dental Association. The address of President Beadles contains many useful suggestions and deserves a careful reading. Dr. R. Y. Henley, in an able paper on "Fracture of the Jaw," shows his ability to carry out the president's suggestion—"if the oral cavity is our specialty, let us claim the field." The production of the valuable paper on "The Sixth-Year Molar," written by Dr. Starke, of Richmond, was the result of an offer of a gold medal by President Beadles for the best essay on this subject, and is an idea that might be successfully introduced into other societies.

REMOVAL.

Dr. R. Y. Henley, who has been associated with Dr. Beadles, of Danville, Va., in the practice of dental and oral surgery, has decided to make Lexington, Ky., his future home. Dr. Henley was one of the founders of the Dental Department, Southern Medical College, of Atlanta, Ga., and filled the chair of dental and oral surgery in that institution until his removal to Danville. He has always been a useful member of the dental societies in the States in which he has resided, and Kentucky has been lucky in gaining such a citizen. Of late years Dr. Henley has been distinguishing himself in the operations of oral surgery, fractured jaws, cleft plates, etc., and has successfully performed many difficult opera-

tions in that line. Having been a constant contributor and at one time associate editor of this journal, we are always glad to hear of his progress and achievements. We heartily commend him to the profession of Lexington, and trust he may receive the reward in his new field of labors his skill as an oral surgeon deserves.

FOR SALE.

Office and fixtures of the late lamented Dr. Geo. W. McElhaney, of Columbus, Ga. This is one of the best opportunities for a good man that will ever occur. This is one of the most completely equipped offices in the South. Nice location, splendid rooms, consisting of reception room, operating room and laboratory, all adjoining. A complete set of instruments and furnishings, consisting of two complete sets fine parlor furniture (summer and winter), shades, curtains, etc.; operating outfit: fine chair, two engines, one standing and one suspension arm, with water motor; complete laboratory outfit; lathe run by water motor. The whole office and outfit to be sold as it stands. Annual practice of deceased often reached six thousand dollars. Address M., care Southern Dental Journal and Luminary, Macon, Ga.

MUCH matter that we intended to go in this issue had to be delayed on account of valuable articles which had a prior claim. In our next we will give a synopsis of some of the most valuable papers of the World's Dental Congress, as well as other valuable and interesting original articles.

SEVENTY-FIVE DOLLARS will buy a second-hand Morrison chair in good condition. Cost new \$120. W. R. Holmes & Mason, Macon Dental Depot.

THE CZAR-A horrible thought strikes me!

The Lord High Executioner—What is that, your majesty?

The Czar—If that dentist was a Nihilist he may have filled my teeth with dynamite. Then the first time I bite hard I shall blow the top of my head off.—Puck.

SOCIETIES.

GEORGIA STATE DENTAL SOCIETY.

OFFICERS.

N. A. Williams, president, Valdosta.

W. W. Hill, first vice-president, Washington.

C. V. Rosser, second vice-president, Atlanta.

H. A. Lowrance, treasurer, Athens.

S. H. McKee, recording secretary, Americus.

O. H. McDouald, corresponding secretary, Griffin.

Examining Board—J. H. Coyle, chairman, Thomasville; D. D. Atkinson, H. H. Johnson, A. G. Bouton, B. H. Catching.

Executive Committee—H. R. Jewett, chairman, Atlanta; D. Hopps, E. L. Hanes, S. B. Barfield, W. S. Simmons.

Standing Committees (Education and Literature)—L. D. Carpenter, chairman; W. R. Holmes, R. W. Thornton, G. M. Moore, W. O. Breedlove.

Etiology—W. G. Browne, chairman; J. L. Stokes, Aug. Burghard, W. R. Taylor, W. L. Cason.

Pathology and Therapeutics—T. P. Hinman, chairman; W. M. Mixon, F. P. Gale, J. L. Fogg, J. E. Cramer.

Operative Dentistry—Frank Holland, chairman; W. W. Hill, S. A. White, D. D. Atkinson, E. L. Hanes.

Prosthetic Dentistry and Metallurgy—C. V. Rosser, chairman; S. B. Barfield, J. C. Brewer, B. F. Sims, R. R. Hogan.

Crown and Bridge Work—R. A. Holliday, chairman; M. M. Ham, J. M. Mason, Thos. Cole, M. G. Little.

Materia Medica and Hygiene—H. R. Jewett, chairman; B. H. Catching, S. H. McKee, S. B. Adair, J. D. Lanier.

Voluntary Essays—J. H. Coyle, chairman; H. H. Johnson, C. T. Osborn, W. A. Summerlin.

Dental Appliances and Improvements—O. H. McDonald, chairman; W. F. Tigner, F. R. Parramore, P. W. Alexander.

Clinics—R. Roach, chairman; I. N. Wells, W. S. Simmons, J. A. Thornton, J. A. Wills.

Arrangements—A. G. Bouton, chairman; D. Hopps, H. S. Colding, S. M. Roach.

RESOLUTIONS OF THE AUGUSTA DENTAL SOCIETY ON THE REMOVAL OF DR. WARDLAW.

Resolved, That in the removal of Dr. Wm. C. Wardlaw, of this city, to Atlanta, Ga., the public sustains the loss of a good citizen and eminent practitioner; the profession here loses an able and conscientious worker, the society its strongest advocate and firmest friend, whose loss to it is irreparable; as its founder, to him are we indebted for its existence to day and the manifold good results following its establishment, notably, professional amicableness, fraternalism and social intercourse, the introduction and observance of which elements and forms have favored the existence thus far and made possible the continual life of the society, therefore,

Be it further resolved, That the Augusta Dental Society greatly deplores the loss of its president and brother, and extends to him in his new field of labor and future home its best wishes for renewed health and strength, success and prosperity.

[By an oversight of the secretary these resolutions did not reach us as soon as they should.]—ED.

COMMITTEES OF SECTIONS MISSISSIPPI STATE DENTAL SOCIETY FOR 1894.

Surgical Dentistry—Morgan Adams, Sardis; T. B. Birdsong, Hazlehurst; E. E. Spinks, Meridian.

Prosthetic Dentistry—A. A. Wofford, Columbus; J. C. Spivey, Vicksburg; J. E. Suber, Crystal Springs.

Physiology and Histology—W. H. Marshall, Oxford; W. A. Guess, Greenwood; E. L. Holmes, Bentonia.

Dental Materia Medica—R. K. Luckie, Holly Springs; Walter Jones, Jackson; W. E. Walker, Bay St. Louis.

Pathology and Therapeutics—George B. Clements, Macon; J. A. Warriner, Corinth; S. R. Wyse, Meridian.

Dental Chemistry—W. T. Martin, Yazoo City; J. O. Frilick, Meridian; W. T. Allen, Amory.

Dental Metallurgy—D. B. McHenry, Grenada; C. R. Rencher, Enterprise; L. A. Smith, Port Gibson.

Dental Education and Literature—J. D. Miles, Vicksburg; W. T. Stewart, Fayette; Frank H. Smith, Grenada.

Incidents in Office Practice—W. W. Westmoreland, Columbus; R. S. Moffat, West Point; W. L. Stovalle, Winona.

Olinics—Geo. W. Rembert, Natchez; J. H. Magruder, Jackson; A. A. Dillehay, Meridian.

Voluntary Papers—Wm. Crenshaw, Atlanta, Ga.; M. C. Marshall, Little Rock, Ark.; J. G. McColough, New Orleans, La.; J. J. R. Patrick, Belleville, Ill.; Wm. H. Morgan, Nashville, Tenn.; L. D. Carpenter, Atlanta. Ga.

Invitation—E. B. Robbins, T. O. Payne, Vicksburg; I. B. Rembert, Jackson.

Executive Committee—T. C. West, Geo. W. Rembert, Natchez; P. H. Wright, Sanatobia.

SOUTH CAROLINA DENTAL ASSOCIATION.

FLORENCE, S. C., September 11, 1893.

Editor Southern Dental Journal and Luminary, Macon, Ga.:

DEAR SIR: Your letter to Dr. C. S. Patrick, president South Carolina State Dental Association, was read at the annual meeting at Columbia, August 8, and the following resolution was the action taken on said letter:

"Resolved, That the secretary be and is hereby empowered, at his discretion, to furnish to the SOUTHERN DENTAL JOURNAL AND LUMINARY the proceedings of this meeting for publication, and that a copy of the printed transactions be sent Dr. Johnson."

On account of the Southern meeting the same week and the Columbian Congress the next following, a good many of our most active members were not present, and, while our meeting was a pleasant one in many respects, I hardly think the transactions would do us credit or be of much interest to the profession, hence I only send you three papers that were read, and I trust we can send you the full transactions of our next meeting.

Yours truly, B. RUTLEDGE, Rec. Sec'y.

[These interesting papers were crowded out of this issue, but will appear in the next.]—ED.

Necrology.

IN MEMORY OF DR. WARDLAW.

A meeting of the Atlanta dentists was held in the Kimball House reading room Thursday morning, September 4, to take action on the recent death of Dr. W. C. Wardlaw.

Dr. B. H. Catching was elected chairman and Dr. M. Z. Crist, secretary. Dr. Catching made a short talk, in which he paid a high tribute to the character of Dr. Wardlaw. Speeches of the same tenor were made by Drs. Browne, Holland, Rosser, Crenshaw, Mr. Selby, and others.

A committee of five, consisting of Drs. Catching, Crenshaw, Holland, Browne and Rosser, reported the following resolutions, which were adopted and their publication requested in the daily press of Atlanta and Augusta, The Southern Dental Journal And Luminary and The Dental Cosmos:

"We have assembled to pay tribute to the memory of our esteemed and beloved brother practitioner, the late Dr. W. C. Wardlaw. Only recently we were rejoicing that he had selected our city as his home. We rejoiced that in his citizenship we were to have a man of spotless character and the purest integrity—one who loved God and his fellow men.

"We rejoiced that there had been added to our local ranks a man of eminent attainments in literature, art and science; one whose reputation was not confined to a continent; one whose innate modesty shrank from publicity, and whose sympathies extended to and aided the most humble; one who was by nature a gentleman, by profession a Christian, by attainments a leader.

"But, alas! He had only reached our gates and entered our walls when death called him to his eternal home.

"To say that we realize our loss does not express our feelings; yet we feel that such a life, crowned with such attainments, is not lost, but shall live with us as a guide and pattern, which will, if we follow it, tend to our perfection morally, socially and professionally.

"May we emulate his many virtues and strive after his attainments.

"Realizing the power and wisdom of God, we humbly bow to his will.

"Our deepest sympathies we extend to his bereaved wife, children and relatives. Their loss is our loss, but his eternal gain.

"B. H. CATCHING,
"WM. CRENSHAW,
"S. G. HOLLAND,
"C. V. ROSSER,
"W. G. BROWNE,

"Committee."

DR. GEO. W. McELHANEY IS DEAD.

In our last issue was briefly mentioned the fact that Dr. Mc-Elhaney had been suddenly attacked with paralysis in the right side, but we were unable to obtain further particulars before going to press. We now have to announce the sad news of his untimely death, which occurred at his home, in Columbus, Ga., on the morning of September 15, a few days after the fatal attack. Thus another terrible example of the mysterious will of Providence more forcibly impresses us with the fact that we know not the day or the hour that has been appointed. The last time I saw him he was at Chicago attending to his duties as a member of the Executive Committee of the World's Dental Congress, apparently in the best of health and spirits. Those who saw him there and looked into his kindly beaming face and felt the warm grasp of his hand in friendship will see him no more on earth, for his spirit has taken its flight to that home above, prepared for him as a reward for a life well and nobly spent on earth.

Dr. Geo. W. McElhaney was born at Ellerslie, Harris County, Ga., on August 13, 1843. His father died when he was only seven years of age. At the age of ten years he was taken to Auburn, Ala., where he was reared and educated in the family of Dr. F. G. McElhaney. The war between the States breaking out, he entered the Confederate army at the age of sixteen and went to Virginia.

He was there only a short time when he was stricken with fever and had to be carried home. On regaining his health he again joined the army, enlisting in the cavalry service under General Lee, of Mississippi. He served through the whole war, making a good, faithful soldier.

After the war he entered the office of Dr. F. G. McElhaney to prepare himself for the practice of dentistry. He first engaged in

practice at West Point, Ga., and was married a short time after to Miss Katie Moore. Some years after, he graduated and received the degree of D. D. S. from the University of Tennessee, at Nashville. It was in 1881 that Dr. McElhaney moved to Columbus, Ga., and associated himself with Dr. W. F. Tignor in the practice of his profession.

After a dissolution of the firm of Tignor & McElhaney, he opened an office to himself and built up a flourishing practice, which he held to the time of his death. Dr. McElhaney has held many positions of trust and honor, and was a useful citizen in his community.

He has been president of the Georgia State Dental Society and of the Southern Dental Association. He was a prominent member of the American Dental Association, and often held positions of honor in that body. He was also a member of the Dental Protective Association, and for many years served as a member of the Georgia State Board of Dental Examiners.

When the movement was inaugurated to hold a World's Dental Congress, his ability as a business man suggested him as suitable to make one of the Executive Committee of that body, which position he filled fully and creditably.

Dr. McElhaney, in addition to all that has been said, was a temperate, moral Christian man, and early associated himself with institutions of that character. He was a prominent member of the Methodist Episcopal Church. He was also an enthusiastic Mason, having been Grand Commander of the Grand Commandery of Knights Templar of Georgia, and also Past Commander of St. Aldemar Commandery, No. 3, of Columbus. Last year he represented the Grand Commandery of the State at the triennial conclave of the order at Denver, Col.

The body of the deceased was buried at Auburn, Ala., shrouded in the uniform of the rank of Past Grand Commander Knights Templar, and on the lid of the casket, almost hidden beneath the beautiful floral tributes, were placed the helmet and sword of the office. The dentists of the city turned out in a body to pay a last tribute to their beloved professional brother, and afterwards met and passed suitable resolutions, which we publish below.

The body was carried to Auburn on a special car under an escort from St. Aldemar Commandery, No. 3, and was laid to rest with the ceremonies of the order.

This State and the profession will feel the loss sustained by the death of Dr. McElhaney, and to the bereaved and sorrowing wife

the true sympathy of a vast concourse of friends go out, in this time of grief and sadness.

H. H. J.

The following preamble and resolutions were passed by the dentists of Columbus, Ga., on the death of Dr. McElhaney:

"Whereas, The grim monster Death has invaded the ranks of our profession and removed from our midst a conspicuous and honored member, Dr. George W. McElhaney, it is appropriate that some public expression should be given of our keen regret at the loss we have sustained, therefore be it

"Resolved, That in the death of Dr. George W. McElhaney the dental profession of Columbus has been deprived of a valued and enthusiastic member, a generous hearted and affable friend, and the community of a useful and honorable citizen.

His extraordinary ability and skill as an operator placed him among the foremost dentists of the South. His zeal and love for his profession were recognized in his work in promoting its highest interests, and his unswerving duty as a member of the Georgia State and Southern Dental Societies will ever be remembered by his associates.

"Resolved, That our sincerest sympathies are tendered his bereaved wife in her deep affliction.

"Resolved, That this simple tribute to his worth as a man and his fame as a dentist be published in the daily papers as expressive of our sentiments.

"C. T. OSBORN,

"W. T. Pool,
"Aug. Burghard,

A GENTLEMAN who was in Madrid for a number of years—Dr. Thomas—devised a plan for destroying pulps that seems so admirable that I want to tell it to you. He puts his arsenic, morphine and cinnamon together, and, having chopped up finely a quantity of cotton, mixes the medicament with it, and fills a bottle with the combination. It is ready for use whenever required, and is very comforting and quieting if the pulp is in a state of irritation. This preparation will not ooze out on the gum. I have been using it for five or six years.—E. A. Bogue, Inter.

The lungs of the average man contain about five quarts of air.

Book Notices.

A TREATISE ON DENTAL JURISPRUDENCE; For Dentists and Lawyers, embracing the following subjects: Dental Jurisprudence, Dental Expert Testimony, Identification by Means of the Teeth, Dental Malpractices, Cocain Poisoning, Fracture of Maxilla During Extraction of Teeth, Injuries and Deaths Due to Anæsthesia, The Jurisprudence of Dental Patents, etc., etc. By William F. Rehfuss, D. D. S., author of "Dental Massage;" member of the Odontological Society of Pennsylvania; of the New Jersey State Dental Society; Dental Protective Association of the U. S. A., etc. Published by the Wilmington Dental Mfg. Co., 1413 Filbert street, Philadelphia, Pa.

This is undoubtedly one of the most interesting and importan books that has come to our notice for some time. It treats of a subject that is becoming more and more of vital importance to the dental profession day by day. It behooves every practitioner of dentistry to inform himself on dental jurisprudence, that he may be prepared for any emergency in case of blackmail or accident. To young or old the information contained in this work is of material interest, for it is just such information that should be ready at hand when needed. Jurisprudence is a subject that is, as a general thing, not thoroughly made conversant in dental colleges, which makes this book all the more valuable. It is a most valuable addition to dental literature, and every practitioner in the land The author has handled the subject ably and should have it. covered a broad field, making it a comprehensive work. Appended is a history of dental legislation, with a copy of all the laws of the United States, as well as foreign countries that have passed dental laws.

FOR an excellent varnish, procure a piece of clear amber, scrape or powder it, dissolve in Squibb's chloroform, which will take some time; add a little absolute alcohol to delay evaporation, and you have a varnish so hard that it will resist almost anything.

-C. F. Ives, Inter.

BROMIDIA is justly recognized as one of the standard preparations of the day, and as a true nerve sedative it is unsurpassed by any single remedy or combination.



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AN OPEN LETTER TO A YOUNG FRIEND.

My Young Friend:

Your questions relative to my treatment of sensitive dentine, exposed pulps, pulp-capping, devitalizing nerves, extirpating the same, filling root canals, etc., I will try to answer in detail, and make the whole, as best I can, comprehensive and plain to your mind, so that you can compare with other methods and practice and draw deductions as your good judgment may dictate.

On this line of dental abnormality you will possibly experience more trouble and difficulty in treating than all else in dentistry. Through journals and discussions, you will perceive great diversity of sentiment (theory and practice) pertaining to each.

We will first speak of sensitive dentine and treatment necessary to relieve. Dentine and enamel are often sensitive under varied conditions, on the surface and in cavities of teeth, and cause much discomfort. As to the cause of such sensation we are ignorant. The nerves are supposed to be in fault, and we treat accordingly, and in a large majority of cases with excellent results. The real cause of sensitive dentine is not definitely comprehended. Some fine-spun theories have been promulgated and earnestly advocated by some learned, progressive men in the profession, but as to facts indisputable and worthy of record as an established, never-varying basis for treatment, I tell you frankly the profession, as a whole, is

no wiser or better agreed on the subject at present than forty years ago. Such being the case, the best and all that we can do, as, under similar circumstances, with sundry physical afflictions, whether we know definitely the cause of the trouble or not, with the young or the aged, we must work to mitigate, at least, and obliterate, if possible, the abnormal state in question. This can be done, and if we knew the whole range of causes I question if we would be able to accomplish more for the relief and comfort of patients.

To know how to treat for relief is of more importance than to know the cause of the trouble to be treated; but let us know it all, if possible. A fever quite prevalent in some sections of the country, for some years past, known and spoken of as typho-malarial fever, is successfully treated by many practitioners of medicine, but none know definitely the cause of the fever. So with many other diseases treated by medical practitioners, and so it is and must be in the practice of dentistry.

Never hold back or decline to go ahead in treating for relief, in consequence of ignorance as to the cause of the trouble to be treated, but grapple with the trouble as it presents itself, with the most effective means at command, and check, if possible, further advance of the disease, let the cause be what it may.

When you check the progress of disease (all variance from a normal state is disease) you will, to a certain extent, have crippled the cause, and will be able to keep the effect of the cause in check and restore patients to a permanent state of normal comfort.

I will not presume to tax you with the numerous opinions and advocacy of the various lines of treatment recorded, for it would embrace a large volume, and possibly profit you nothing in addition to what you will derive at College.

In as few words as possible I will explain to you my practice and results for many years past. My treatment is simple but effective and satisfactory. I use but few remedies in treating for sensitive dentine. Heavy shank, smooth cutting chisels and excavators (shaped to suit,) nitrate of silver, creosote, stick and pumice, and burnisher, covers the ground of requisites for relief and success in treating sensitive dentine.

Under some circumstances the chisel or excavator rightly applied is sufficient for relief; then, again, more extended treatment is requisite, and must be heroically applied before relief is obtainable. Around the necks of teeth, chisels will be most frequently called for. You will be surprised to see how quick the relief upon application of the chisel if forcibly applied. It is often the case

that one heroic cut or scrape with a sharp chisel will remove all sensitiveness, or to such an extent that the necessary after dressing and polishing of the surface of defects is not in the slightest degree unpleasant to the patient. Chisels for this specific purpose should be of finest temper and very sharp, excavators, also, and should be applied with steady hand and heavy force—always more effective and satisfactory than engine burs. In cutting for removal of sensitiveness of dentine always cut with force and quickly. Light touches are objectionable and should be avoided. Heroic cutting is the remedy of all remedies, as you may and will learn to your satisfaction from experience. It is sometimes necessary to follow chisels and excavators with nitrate of silver or creosote, or both, especially if the trouble is deep seated.

Either remedy can be successfully applied with appropriately pointed soft pine sticks or cotton twirled on rose-head drill. Whenever the stick caustic (nitrate of silver) can be successfully applied. it is best. If a pine stick, or cotton on drill-head is to be used to convey the material, it must be reduced to powder by scraping, or to a state of fine granules by crushing, then moisten the point of stick or cotton on drill with water, so as to hold the powder or granules and convey to parts affected and rub over surface, or hold firmly for a few seconds, three, five or ten, as respective cases may require. Creosote can best be applied in the same way. ful never to take an excess of material on either, lest soft tissues should suffer. Have no fear of discoloring teeth with nitrate of silver. The discoloration produced, if objectionable, can be easily removed by an application of iodide potassium manipulated with soft pine or orange wood stick and pumice. If let alone it will wear off or pass away in a reasonably short while. After a free use of the stick and pumice, or silex, to effect a smooth polished surface of affected parts, having been cut or scraped with chisels, use suitably shaped burnishers with considerable force (as recommended by Dr. John Hall) and rapidity until perceptible heat is produced. In a large majority of cases so treated the result is satisfactory and no repetition of treatment necessary.

Whatever the treatment recommended at College, accept and record it as other teachings that may be imparted, and when you commence practice, and opportunity offers, test for merit your store of remedies, (the above, as others) and when you have determined as to value, use those which give best results. Good results are what you will want and must have, or fail of success. Work for them, and get them as best you can from any source.

It is due to yourself, your patients and your profession, that you shall experiment and test for merit of remedies and modes of practice. It will not be expected or required of you or any student of dentistry to conform in practice strictly to all the teachings imparted in College.

Conformity to College instruction, theory and practice, in a general sense, in beginning to practice, will be a safe line of action. It will enable you to start easily, avoid confusion and mixing up of things—ideas, theories and practice.

But to be progressive and keep abreast with the times (now very fast) you must be an independent thinker, draw comparisons, make deductions and build up and establish a practice with some of your own ideas worked in.

In lining out for definite and well established features of practice, with a view to success, and to render as best you can the greatest amount of effective, useful service to patients, all classes, old and young, rich and poor, male and female, let true eclecticism be your foundation, and build up as an independent conservator, guided by common sense principles in every step taken. And to thus act successfully and have others follow, thereby strengthen your foundation principle, eclecticism. You must gather knowledge concerning practice from whatever legitimate source you can, through conversations with dentists of experience, observation at the chair and in the laboratory, in the use of instruments and material, liberal journal reading and regular attendance on professional meetings, (conventions and associations.) And as you gather and store information for benefit in practice, dispense freely and liberally to others, it will be your duty, and it will prove a pleasure, for in so doing you will have performed an act of humanity and done nobly and right by professional brethren.

As regards exposed pulps, capping, etc., circumstances will dictate and regulate modes of procedure. If the pulp, through excess of decay, has been exposed and is giving trouble, there is but one course to pursue, with a fair promise for satisfactory result—devitalize and extirpate. It is the surest, safest and wisest course to pursue. To devitalize, take a small pellet of cotton or bibulous paper, hold with pliers, moisten delicately with creosote, then touch to finely pulverized arsenic so as to secure the tenth, twentieth or fortieth of a grain, convey to cavity, and place, if possible, a little to one side of exposed pulp, then insert another larger pellet of cotton or paper, upon which place beeswax, and apply a warm instrument (flat oval shape amalgam plugger is best) to soften the wax and fix

it in place without direct force by pressure. To press forcibly upon material in cavity over exposed pulp often causes severe pain, which can always be avoided by manipulating the wax over cotton with hot instruments. Let the preparation remain in the cavity eight, twelve or twenty hours, as the case and circumstances may require, then remove, wash out cavity and test for vitality, and let alone for ten or twelve days, never longer if to be avoided. Remove with engine burs or excavators the floor of cavity for direct exposure of pulp, which, when favorably exposed, remove with appropriate pulp and nerve extractors. Nine times in ten the effort will be a success, and without the slightest discomfort to the patient. By waiting as above suggested the pulp and nerve matter in root canals lose vitality, soften, and leave the walls readily when effort is made to remove, leaving the pulp chamber and canals in a favorable condition for immediate filling.

In treating upper and lower molars and upper bicuspids, there is often difficulty in removing all of nerve matter from the canals. The formation of anterior roots of some lower molars and buccal roots of upper, preclude the possibility of successful introduction of smallest size nerve instruments into the canals for the removal of the nerve. Under such circumstances dry out with bibulous paper and apply to pulp chamber and canal, from which the nerve has been successfully removed, creosote or campho-phenique, and pack tight with cotton slightly saturated with sandarach, and let remain a week or so, then make further effort to remove nerve matter by any means at command, use of delicate drawn temper broaches, syringes. etc., when you have, through patience and perseverance, accomplished all that can be accomplished in the effort at the removal of nerve filaments, syringe thoroughly with water, then alcohol, and as far and well as you can, saturate with creosote or campho-phenique, as above mentioned; pack well with cotton against ingress of fluids for several hours, or a day or two, if necessary, then remove packing and dry canals as best you can, and fill root canals with beeswax and small particles of cotton fiber or embroidery silk. Bacteria, and all that class of "little varmints," so much discussed and written about, can make no impression upon beeswax; it is a perfect barrier to their progress, therefore a good material for root filling.

In the use of wax, you will have to use drawn temper canal broaches or pluggers heated to flow the wax, first small size, then larger; as the canal increases in size toward pulp chamber, place at the bottom of chamber after canals are filled, a piece of rolled lead, size to suit, then fill cavity and finish to completion.

Beeswax makes a perfect root filling. It can be easily and rapidly introduced; flows freely to extremity of canal when heat is applied. No virtue in cotton or silk, simply aids in forcing and packing canals. Experience will demonstrate features of merit of all—wax, cotton and silk.

All that can be accomplished by filling canals is the preclusion of moisture and gases, and for this purpose wax excels any other material now in use; fire alone can destroy it; it is non-irritating and non-conducting in property, causes no discomfort, and can be manipulated quickly. If forced through point of root no injury will arise.

There has been a time in my practice when I, like others, would try to treat, cap and save exposed pulps, but experienced many failures and sad disappointments after patient, anxious efforts had been indulged, has convinced me of the folly of such a practice. Not one time in twenty can it be made a success, and that preparation is too small to justify the practice. Many dentists profess to make a success of pulp capping and paramount preservation of teeth through that means. My experience teaches me different.

If, in excavating decay preparatory to filling, you have removed most or quite all of the decay, you should, as is sometimes done, puncture the pulp with the point of an excavator or drill, you can and may treat and fill cavity successfully without devitalizing and removing pulp. If the tooth has never ached or given trouble, and you realize the blood discharged through puncture is healthy, avoid further approach to pulp with instruments; shape the walls for filling, wash out cavity and saturate with campho phenique, and fill as follows: Place a piece of sheet lead slightly coated with beeswax over the base of cavity, over which pack gutta percha until the cavity is one-third or one-half-filled, then fill cavity to completion with any material preferred and finish, the chances will be largely in favor of success.

Now comes the difficulty of difficulties a dentist has to contend with—putrescent state of pulp chamber and canals, and sometimes abscess and discharge at point of roots. The first thing to be done is to open into canals freely, cleanse thoroughly and disinfect. If the derangement is far advanced and of long duration, and especially if it be not convenient for the patient to meet appointments with regularity, it would, in a large majority of cases, (locality of

tooth to be considered) be best to extract, for the chances for successful treatment would be limited.

For check of disease and cure, if it can be effected. After having done as above mentioned, apply creosote freely, force it through the root canal, process and soft tissues; close cavity in tooth with cotton, following day remove cotton, syringe forcibly with water, then alcohol, forcing it, if possible, through canal and fistula, and reapply creosote same as yesterday; pack with cotton, (not very tight) wait two days, remove cotton, syringe as before, dry cavity and introduce dry cotton on fine broach to test for odor; if it prevails, repeat treatment for a day or two longer, and test again, and if further treatment is necessary, use half and half creosote and tincture of iodine-several applications, if necessary, proceeding as previously with the creosote. When the odor abates (never sooner) discontinue creosote and iodine, and use in same way campho-phenique daily for several days, then pack tightly with cotton for several days; then if there is no offensive odor upon test, proceed to prepare and fill as above explained. If there is any after trouble it will be above point of roots, the process and soft tissues alone being involved, which can be as successfully treated through the opening of exit as through canal. If upon examination there are evident indications of waste of points of teeth and loss of alveolus surrounding, the treatment must be varied, sulphuric acid must be used. Dilute as follows: one drop, or one part of acid to five, six or eight of water, or even stronger would not be amiss, and will often prove beneficial in action upon diseased bone, and not at all hurtful, or seriously so, to soft tissues. Protect well with pads or wads of cheese-cloth or bibulous-paper as safeguards against injury to the mucous membrane.

Unless a very extreme case, three or four applications of the acid (less or more diluted) will be quite sufficient. When so treated and filled, and the discharge through gum has ceased, opening closed and firmness of gum over point of roots restored, it may be termed a success, and nothing more can be done, but you must not flatter yourself there will not be after trouble, and do not encourage your patients to think it is all right and a permanent cure; for I assure you there are at least nine chances to one there will be after trouble, and possibly not far distant. It is this conviction on my mind, established through many years experience and careful observation, that prompts me to advise that extraction is wisest and best practice in a large percentage of cases as they present for treatment.

You may think strange of the limited number of remedies I propose and use, considering the great number recommended and advocated, but when you have experimented and tested to the extent I have, you will possibly conclude as I have, that it is not the great number of remedies, but the effectiveness of remedies that gives In the treatment of such troubles as most satisfactory results. above mentioned, should you fail of success with the few remedies named (if rightly and persistently applied) you would probably fail if all known remedies were at hand for you to select from. Right here I will say a word or two to you about remedies, that you may be careful when you commence practice, and not overtax yourself as many do, to the extent of confusion and embarrassment when trying to select and apply for effect. Keep in mind that it is not the multiplicity of remedies for treatment of this or that disease or trouble, but it is the effectiveness of remedies, few or many, that is the point and not to be forgotten.

What cannot be successfully accomplished in effecting relief and cure in *legitimate* dental practice, with less than a dozen effective, well known and well tested remedies, could not be accomplished with all the remedies to be found in a well stocked drug store. This is not an old fogy assertion, but it is progress, advanced progress, that science must and will sustain.

In looking over half a dozen Dental Journals of this theorizing period, one becomes amazed and bewildered in reading the innumerable remedies proposed and advocated in treatment of few derangements of the dental organization, many of them of no special merit, and not at all applicable to disease in question. It is time for a halt and reflection. There is just so much abnormal pertaining to the dental structure and tissues pertaining thereto, and no more, hence the absurdity of the long list of remedies recommended for use. A few, well selected and rightly applied, will give best results, and it is the results, favorable results, we treat and work for.

The removal of nerves from some root canals after devitalization and softening or partial decomposition, is a very easy and simple operation, especially straight roots. Ordinarily a nerve broach or barbed nerve extractor is all that is requisite for success. With flattened or crooked roots the operation is more difficult and often requires much time and patience. In such cases, delicate and suitably tempered instruments must be used, and cautiously. When an operation for removal of nerve is once undertaken it must be made a success if possible. If near the point of root there shall be detected nerve vitality, instead of reapplying arsenic, apply forci-

bly small size broach or canal plugger. One or two forcible thrusts will generally suffice to deaden or destroy vitality, then with smaller size broach feel for filament and remove, and the canal will be in condition for immediate filling.

In front teeth when cavity and approach to nerve canal is favorable for application of direct force, also when teeth are excised for pivoting, the speediest, most painless, and altogether best means of removing nerve, is to shape suitably (long taper) a stick of whalebone or orange wood, and force with mallet into nerve canal. twirl and withdraw quickly. Nine times in ten the entire nerve will come out on whalebone or orange wood and without unpleasant sensation to patient. In such cases the canal may be medicated with creosote or campho-phenique and filled without delay. Be careful to be thorough in the operation of nerve removal: do not hurry in such operations, at risk of success, but be deliberate and patient. It is all important that every vestige of filament shall be removed from canals before filling, really more important than canal filling in a majority of cases. The smallest imaginable quantity of decomposed matter in a root canal after a tooth has been filled, will give trouble. Treat to prevent after trouble if possible. Sometimes you may succeed and sometimes you won't.

When you have learned to treat and fill root canals successfully, you will have accomplished much, but there are other features and duties in the practice of dentistry quite as requisite or far more important for you to comprehend and know how to treat and deal with for benefit of patients, which I may mention in my next letter.

In my judgment the filling of canals is not half so difficult or important as treating and thoroughly preparing for filling. For ten years I treated and prepared root canals carefully and as thoroughly as if to be filled but discarded and abandoned entirely the practice of filling them, waited and watched for results. I never realized, or in a single instance as I can remember did I detect discomfort to patient or injury to teeth in consequence of omission to fill roots. I now seldom fill roots unless there is disease and loss of osseous structure at point of root, and then successful point stopping is all that is requisite for preservation of tooth.

The old idea and theory advocated, that "nature abhors vacuum," is an absurdity and false. The human frame as a whole contradicts the theory. I have extracted superior incisors and canines that had been pivoted for twelve or fifteen years and the pivot tooth retained with perfect comfort, and when the roots were extracted, split open and examined, there was not a vestige of fill-

ing material of any description above point of pivot, the entire canal clear and free from disagreeable odor. That was pretty conclusive evidence that a tooth could be treated and preserved successfully, after nerve extraction, without filling canal with any material. If a hickory pivot (well inserted) to hold pivot tooth, as was the practice many years ago, would and did preserve roots intact, it is presumable that a good filling of any material in use will do as much. In my own mouth I have a tooth from which nerve was removed, canal treated and cavity filled more than ten years ago, and to the present time it is useful and has not caused a moment's discomfort. My experience on this line is that of many patrons.

You comprehend my position, I hope: That it is more important to treat and thoroughly prepare root canals than to fill them with any material, but if to be filled, or must be filled, by all means fill with the best material, beeswax, as above explained. Work always on a conservative line, strive for excellence in treatment and execution of work, with measured and studied regard and consideration for the interest of your profession and patrons. Be careful while at College, never to run counter in controversy to opinions and teachings of the professors, but accept respectfully, and treasure as of great value all the information (theory and practice) they may impart and advocate. It is designed for your benefit and will doubtless greatly aid you in your first efforts at practice.

What offerings I and others may tender during your years of study and preparation for practice, record as matters to be drawn upon and tested for merit after you have commenced practice.

As I am doing by you, telling you of favorable and good results through a plain conservative line of practice, you do ultimately unto others and feel thankful for the privilege. Let it be your rule of life, to subdue selfishness, ignore prejudice, be liberal and generous with professional brethren, and do nobly to the extent of capacity for relief of affliction and suffering whenever in your power.

Yours truly,

OLD PRACTITIONER.

A New Yorker is suffering from blood poisoning, the result of a bite from a pet parrot.

SOME NOTES FROM PRACTICE ON CROWN WORK.

BY DR. CHARLES L. STEEL, RICHMOND, VA.

All forms of artificial crowns for attachment to stumps of natural teeth have their disadvantages and some have their advantages. My own idea of the crown embodying the fewest of the former and the most of the latter is the all-gold cap crown. A cap, because one of the every day laws of mechanics is that anything bound about with a metal band is stronger than if a pin or pivot is forced into it; witness the ferules on our canes, umbrellas, instrument handles, etc. Gold, because that metal possesses the softness necessary for perfect adaptation, and at the same time sufficient hardness for all ordinary mastication, and is more pleasing in appearance than any other material except porcelain. Porcelain is, of course, perfect from an æsthetic standpoint, but the brittleness of this material makes it, in my opinion, highly objectionable for masticating purposes. Especially in cases of very "short bite" every stroke of our corundum weakens our crown seriously, if not fatally, whilst the gold crown is only strengthened because of the decreased leverage upon it. All gold, because this form is stronger in itself, and allows opportunity for stronger attachment than if weakened by the addition of porcelain face. Any undue display of gold is, however, very objectionable, and should never be resorted to; consequently, when we come to crowns for the anterior teeth we are compelled to resort to porcelain. Even in these, however, I adhere to my plan of first capping the stump and then put a porcelain face on this cap. Oh, the incalculable amount of good our profession has been able to do for their patients since the advent of crown work. The old shells which we patched up year after year into unsightly masses of amalgam, and knowing our work was even then comparatively temporary—those split teeth and those roots condemned one time to the forceps—we now convert into organs which, except for the usual absence of the nerve, are far more perfect than any which nature ever produced. words these, but a moment's thought convinces one of their truth. A properly inserted crown restores the proper shape and articulation of the original tooth; mechanically, it is as good; the gold of which it is composed is absolutely indestructible by any destroying agent ever found in the mouth. Micrococci, staphylococci, and all

the other cocci wear out their own teeth in vain attempts on its polished surface, and exhaust themselves in fruitless efforts to find a weak spot even at the gum margin.

With these few preliminary remarks, I proceed to detail as briefly as possible my general method of constructing crowns with Having decided to crown a some variation to suit special cases. tooth, if the nerve is dead I treat the root or roots, secundem actem, of course, and fill them. Next get the circumference of the neck of the tooth. This I do by tying around it a ligature of waxed floss silk, just as in applying the rubber dam. I prefer the floss silk instead of the wire, as recommended by many dentists, because it is applied with more ease and less pain. Cutting my ligature and straightening the loop, I have the exact linear measure of the circumference of the neck. A piece of gold (22k, No. 32 American gauge) can be cut this length and soldered at the ends, thus giving us a collar of proper size to just fit the neck of the tooth, but I prefer to use the seamless gold collar, made of all sizes by the White Company, finding them softer and stronger than any I can make. I now turn my attention again to the tooth. First remove every particle of decay; then, with properly shaped corundum wheels and points, cut away the tooth on the grinding surface until there is sufficient room between it and the antagonizing tooth for the crown cusp; then bevel the tooth from the neck toward the grinding surface. If the tooth operated upon is dead, this is a very simple procedure; if a live one, it is equally simple to the operator, but rather more painful to the patient. This pain, however, can be greatly lessened, if not entirely controlled, first, by keeping the corundum moistened with alcohol, which somewhat diminishes the pain and greatly increases the cutting quality, and, secondly, by the application of a strong solution of muriate of cocain. pain recurs, and then renew the cocain. Having beveled the tooth so that the collar, properly shaped, will slip up to the neck of the tooth, proceed to adapt this collar accurately. The White Company make a set of mandrels for the various classes of teeth, and a collar shaped on the proper mandrel will approximate the shape of the neck of the tooth for which it is intended with marvelous accuracy. I always slip my collar on one of those mandrels before applying to the tooth, then try it on, remove to festoon it to conform to the gum margin, replace it and burnish down any irregularities between it and the tooth. Just here I would call attention to one reason why I think it impossible to properly adjust a ready-made crown. By having the outer end of the collar open we can see how its inner

surface bears against the neck of the tooth and thus correct any irregularity in the fit. With the band or collar in place, I now proceed to adjust the cusp to it in proper opposition to the antagonizing tooth. I stamp out my cusps with steel dies from gold plate, filling the inner surfaces with solder. Having fitted the collar and cusp properly to each other, I wax them together, remove carefully from the mouth, invert and solder. The more perfect the joint between collar and cusp, the greater the ease and neatness the soldering will be; but, should any little interstice be left, the solder can be made to flow into it nicely by first packing it with gold foil previously rubbed up in borax. I failed to speak of contouring the band to the proper tooth shape. This is done before fitting the cusp by slightly tucking in the buccal surface of the band, with a pair of contouring pliers, or the ordinary round nose pliers are almost if not quite as good. After soldering, the crown is dropped into dilute sulphuric acid for a short while and upon removing it from this. I fill the crown with plaster. This is done to prevent any possibility of changing the shape in the process of finishing. Our cusp should always be wide enough if possible, to infringe against the adjoining teeth, thus giving additional strength for masticating and making the crown more comfortable by preventing food from crowding between. Where the space between the teeth is very great. I sometimes widen my buccal surface with a small piece of gold plate. Where I crown a bicuspid with the tooth posterior to it missing, I always attach a molar cusp to my collar, thus giving increased masticating surface. Where this is done it is specially important to let the projecting edge of the cusp if possible, knuckle against the adjacent tooth for additional sup-Coming to the anterior teeth when it becomes necessary to have a porcelain face, I fit my collar as before described, then cut away all the anterior portion of the gold, with the exception of a narrow band just at the gingival margin; I select one of the porcelain faces, made thin and with long pieces especially for such work, back it up, and with the collar in position on the tooth, fit the face to its place. Previously to backing the tooth, I bevel the cutting edge on its palatal surface, so that only the good surface will be presented for biting. I mentioned before the fact that I took away as little of the natural tooth structure as possible. If we are fitting the face now being described to a live tooth, you can readily understand that this becomes especially important; in order then to get our porcelain in position it becomes necessary to grind out the inner surface of the porcelain with small circular wheels in the dental engine. This of course makes our porcelain rather frail, consequently if the tooth is dead, I cut into it more freely, so as to leave the porcelain thicker and stronger. In dead teeth, I sometimes use a pin in the root, but very rarely, as it is seldom necessary, a band crown put on with a good cement being amazingly strong. After the crown has been nicely shaped and polished, the plaster is removed from the inner surface and tried on in the mouth. If found correct in every respect, it is removed, that and the tooth stump thoroughly dried, a thick cream of oxy-phosphate mixed up, the crown filled with this, pressed to its place and held there till the cement is hardened, when the surplus cement is trimmed away.

HISTOLOGY. *

BY DR. BENJAMIN SIMONS, CHARLESTON, S. C.

On reading Drs. Chupeins, Raffen-Spergens, A. P. Johnstones and Patrick's account of interstitial change or growth of the tooth, as seen in July issue of Dental Office and Laboratory, one cannot but feel interested and curious to try and account for this strange phenomena, or at least to aid in bringing a subject, that is of so much importance to dental science, before the notice of the profes-Dr. Patrick, in his able piece, seems to refer particularly to dentine, and says little regarding the enamel. Dr. Johnstone says: "It grew and it grew," and Dr. Raffen-Spergen asks, "Do the teeth grow?" This fact seems settled beyond a doubt from the proofs before us. The question now is, how do the teeth grow! Should the fang and crown be covered with a layer of crustapetrosa, the suggestion as borrowed from Richard Owens. not seem to us that this will serve to account for the phenomena, since crusta-petrosa has its origin in the sub-mucous tissue, and would die in a short time after the crown had erupted, most probably, on account of its being underlaid with almost inorganic substance, enamel; its means of circulation would be destroyed except at the neck of the tooth, where it unites with the true cementum. Admitting that there is such a covering is it not probable that the secretions in the mouth would stain it at an earlier period of life.

^{*}Read before the South Carolina State Dental Society, at Columbia, August, 1893.



which staining none of the writers mention, hence it appears that the substance must be more dense than crusta-petrosa, so this theory seems not satisfactory.

It is also advanced that the change in the position of the filling in the tooth is brought about by change of the tooth substance, "similar in kind though different in degree," since the rodent's tooth grows as a whole, and if man's undergoes a change only in part, then the enamel or covering must have the power of deposition and absorption of inorganic matter through the media of nerves, blood vessels and lymphatics as exists in true bone. the tooth shows no signs of wear, and the filling positively continues to change its position, this seems to establish the fact that the tooth is capable in certain cases of true interstitial change in the part that is irritated by the filling and does not continue to grow like that of a rodent. But why does the filling move to the cutting edge of the tooth, which is more dense, and not make its way up the more highly vitalized portion and be ejected there. Gravity may, in part, account for the movement, presuming it is on a superior tooth, but the force seems to be overbalanced by the vital inducement of a more vascular substance above. It appears to us, that possibly some valuable light could be thrown on the subject by microscopic examination of such teeth, but there would probably be some difficulty in obtaining a tooth of such recuperative capacity. We may say that nature had been guilty of a misdemeanor and placed a tooth in a man's mouth that would more properly belong to a rodent, but such freaks of nature it would not do to encourage.

LOCAL ANÆSTHETIC FOR EXTRACTION OF TEETH OR PULPS.

R.	Cocaine hydrochlorate grs. v.
	Acid carbolic xtals grs. iv.
	Gum camphor opt grs. vi.
	Glycerine, pure grs. xv.
	95 per cent. spts. vini Rect. Q. S. add drs. ii.

Hypodermic syringe. Inject one or two drops deeply into the gums on inner and outer side of tooth, and apply over the gums around the tooth, also in cavity of tooth, a piece of absorbent lint or cotton wet in the solution. Wait four or five minutes (by the watch) and the gum can be freely incised and tooth extracted with but little pain.—Exchange.

ADDRESS BY PROFESSOR PAUL B. BARRINGER, OF THE UNIVERSITY OF VIRGINIA, ON THE INFLUENCE OF THE TEETH UPON THE DIGESTIVE TRACT.*

REPORTED BY DR. E. P. BEADLES.

(Professor Paul B. Barringer, professor of Physiology and Surgery at the University of Virginia, gave the Association a most interesting address upon the "Influence of the Teeth upon the Digestive Tract." This address was listened to with great interest by the members of the Association. Professor Barringer is an attractive speaker, clear and logical in his utterances. It was hoped that this address could be printed in full, but owing to circumstances Professor Barringer has been unable to furnish the manuscript, hence this imperfect synopsis of his address.)

What has the tooth to do with the alimentary canal? A good deal. After prehension, mastication is the first act in putting the food into the blood. Too great importance cannot be attached to the proper preparation of the food to be acted upon, by the different fluids which split it up ready for absorption. The saliva is the first of these fluids, and is derived from the secretion of four glands, viz: the parotid, sub-maxillary and sub-lingual, also the muciparus glandules of the cavity of the mouth.

Ptyaline is a substance peculiar to the saliva, and is the weakest of the ferments which act upon the starch in the food. The starch grain has an envelope which the ptyaline does not act upon, hence the importance of first crushing or breaking off this outer covering. The action of the ptyaline upon the starchy substances of the food is to convert them into glucose. Traces of glucose may be detected in one minute after the ptyaline comes in contact with the starch. The rapidity, however, with which this action is manifested varies very much at different times.

The next principal action upon the food is by the gastric juice, furnished by the glandular apparatus of the mucous membrane of the stomach. Two of the principal ingredients of the gastric juice are hydrochloric acid and pepsin, both of these are powerful digestive substances. Gastric juice has the property of digesting substances of an albuminous nature. This is best shown by suspend-

^{*} Delivered before the Virginia State Dental Society, August 8, 1893.

ing in gastric juice pieces of coagulated fibrine and keeping the fluid at a temperature of 100 degrees Farenheit. The fibrine swells rapidly up, becomes transparent and gelatinous, and after a time dissolves. The same effect is produced, though more slowly, upon hard-boiled white of egg. The solid caseine of cheese is liquified and the oleaginous particles set free.

The digestion of muscular flesh is a process of disintegration. The connective tissue intervening between the fibrous bundles vields to the action of the gastric juice, and the fibres themselves then become separated from each other. The substance of the muscular fibres then break up into shorter fragments and under the microscope they will be seen to have lost the distinctness of their transverse striations. If the food has been well masticated before taken into the stomach this change goes on uniformly and rapidly through out the whole mass. If the heat be swallowed without mastication the action progresses regularly from without inward: The gastric juice, together with the disintegrated debris of the food, after commencing its action in the stomach passes into the upper portion of the intestine. The pancreatic juice has the power of transforming starch into sugar, also has the power of emulsifying the fats as well as dissolving coagulated albuminous matter. Lastly comes the intestinal juice and digestion in the intestines, also the large intestine and its contents. As the remnants of the alimentary mass pass the situation of the ileo-caecal valve and enter the large intestine, they begin to acquire a more pasty consistency and a peculiar repulsive This offensive odor of the feces is due to the presence of sulphuretted hydrogen, and in many cases a bad breath is due to the resorption of the H.2 S. into the blood, through the portal circulation, and is carried to lungs, thus cast off by exhalation.

Not only is it important that the food should be most carefully masticated to be properly digested; but it is important that no germs from any decayed teeth should be carried into the stomach with the food. It is true that there are few germs which could withstand the action of these fluids if brought in contact with them; but we have seen that improperly masticated food may go through without being digested, and through this the germs may find their way into the system.

Much harm also may be caused from food remaining between the teeth and allowed to decay, as germs are here developed and carried into the stomach. There is no ferment in the alimentary canal whose office is more important than the first act of mastication, and without good teeth there cannot be perfect mastication.

DENTAL HYGIENE.*

BY J. W. BOOZER, D. D. S., COLUMBIA, S. C.

Mr. President and Gentlemen:

The human body is such a complicated piece of mechanism that in order for it to be in perfect health it is necessary for each part to perform its function. Every organ is so related to every other organ that a defect or lesion of one, however inferior its function, affects every other part of the system, and thereby the general health is impaired.

The teeth play an important part in the first stages of digestion, and if, from loss of these organs or other causes well known to the intelligent dentist, the food is improperly prepared, it goes to the stomach mixed with vitiated muous and saliva, overloading that organ and throwing an undue amount of work upon it.

Impure blood follows impaired digestion. From lack of nutrition there is disintegration of the whole or some part of the organism. Seeing this interdependent relationship between the organs, how careful we should be as dentists not only to make every operation of ours as perfect and as complete as lieth in our power, but we should also endeavor to instruct our patients in the laws of health, and especially how to preserve the dental organs.

There has been in the century now drawing to a close such a marked tendency to degeneracy in these organs, that one of the venerable lights of our profession has even expressed the fear that without some grand discovery of science, or some far-reaching philanthropy in the way of public education along this line, ere many more centuries shall elapse, our race will have become edentulous. Whether this be a prophecy well grounded, or the mere forebodings of a pessimistic mind, it is nevertheless a very noticeable fact that the teeth of the children of to-day decay at a much earlier period of life than they did only a few decades ago.

In view of these facts, it behooves us who have the care of the teeth of the coming generation in our charge, to inquire into the causes, and, having found them, to use every effort in our power to counteract these influences. The structure of the teeth being now, as it is, comparatively well understood, and knowing that the teeth are formed at a very early age, we may expect to accomplish the

^{*} Read before the Twenty-third Annual Meeting of the South Carolina State Dental Association, Columbia, S. C., August 8-12, 1893.



greatest amount of good by instructing parents. I venture the assertion that perfection, as to quality of tooth structure, depends more upon the attendant circumstances during gestation and lactation than upon any other period of the same duration in the life of the individual. Time will not allow me to dwell upon the many important matters, such as exercise, ventillation, water, food, and the like, during this period so important alike to both mother and child. If circumstances prevent us from mentioning these matters to our patients, we might present them with suitable literature on the subject, such as "Letters from a Mother to a Mother," by Mrs. M. W. J., and other similar works.

Next in importance, I would mention the period from the time the child begins to partake of solid food until the eruption of the second permanent, or twelve year molars. This is the period at which, if I am to improve the condition of the teeth, I want them under my care. At this age, also, mothers, and fathers as well, have an important duty to perform, for without their co-operation the dentist can do very little. At this time the appetite can be trained to relish such food as will be most conducive to health. Now physician and dentist should unite in directing the use of bonebuilding foods. Then, by advice on the part of the dentist, and persuasion, sometimes something stronger than moral suasion, if necessary, on the part of the parents, the use of the brush can be instituted. Plenty of out-door exercise is now indicated. formed at this early period of life are apt to be lasting, and the dentist should insist upon a visit to his office by the child, at least every four or six months. If, through neglect, the teeth are found to contain a deposit of calculus or even a stain, as is generally the case at the time of the first visit, this should be removed. The dentist can then often inspire in the child an ambition to keep the teeth clean. which will not only be of lasting benefit to the patient but a source of much comfort to the patient.

Here it seems that the profession (I hope the older members will pardon my remarks) has come short of its duty. We are often called upon to extract a tooth, or, perhaps, insert a single filling for a patient. Perchance we are very busy that day—crowded with engagements—or, for some other reason, finish the operation as quickly as possible, receive the fee and dismiss the patient. In nine cases out of ten if we would only look we would find other teeth needing our attention, probably some worse than the tooth operated upon. It may be that the necks of several teeth are covered with tartar, which should by all means be removed. Or, in the case of the ex-

traction, we notice the calcarious deposit, but do not remove it. Why? Is it because it is too much trouble, or the fee not sufficient? If so, shame on us! to set ourselves up as members of one of the liberal professions and yet be actuated only by motives such as would become one who plies a trade. Let us in every instance make a critical examination and advise our patient as to what is for his or her best interests.

In addition to removing all deposits of calculus and filling all carious cavities of such teeth as are worth saving, the remaining decayed teeth, pieces of teeth, or roots that cannot or are not going to be used in crown or bridge work, should be extracted and the mouth put in a healthy condition. Sometimes an antiseptic mouth-wash is indicated.

Often a tooth which, a few years ago, would have been sacrificed, can be treated and saved. But here I would caution against too hasty filling, without proper treatment (the now so much discussed immediate root-filling) in the case of teeth having putrescent pulps. And especially would I warn my fellow practitioners against the growing practice (miserable and vile though it is) of stopping rootcanals with cotton, silk or other vegetable fibre, saturated with antiseptics. Unless the cotton is packed more solidly than it is in a bale with hundreds of pounds pressure, which we know is never the case, there is likely to be an infiltration of lymph. at first prevented from becoming putrid by the antiseptic, will gradually lose the antiseptic into the surrounding tissues by osmosis or capillary attraction, or both. In a few years the antiseptic, so much relied upon, being exhausted, a formation of putrid matter will be the result, and not only this, but in some instances an alveolar abscess with all its attendant evils and much suffering to the patient. Even if there is no abscess, the peridental membrane is almost sure to become affected, and what is often worse than an abscess, with fistulous opening, this putrid matter is being carried off through the system. Do you ask what this has to do with hygiene? If this does not affect the patient's health he must have an iron constitu-Who of us can say how many a case of catarrh might not besuperinduced by just such a condition of affairs? Yea, I doubt it not, the health of many a patient is impaired by improperly filled root-canals.

I had intended referring to the danger of infection from insufficient cleansing of instruments, and wished to urge the use of disinfectants and germicides as a precautionary measure, but I havealready too long taxed your patience and will simply say, "be careful."

Finally, gentlemen, I would urge you to continue the search after Truth. With the field of discovery open before us why should we hesitate? We have passed two stages in the development of our profession-Relief by Extraction, and Replacement by Artificial Dentures, and are now in the midst of the third; Preservation of the Natural organs by ordinary Dental operations. But a fourth is dawning upon us. Education as to the proper mode of life—air, food, water, exercise, etc., for the perfect development of the teeth. Though to many it seems impossible to do much to better the condition of the masses; students of sociology are watching with interest the circumstances that are transpiring to bring mankind to realize their true condition. Let us not only study, investigate and compare along this line, but let us instruct our fellow-man in the knowledge thus attained, being assured that if we rightly employ the time and talents entrusted to our care we shall prove ourselves benefactors of mankind, and insure for generations yet unborn a perfection hardly dreamed of in these Pearls of Wealth, Health and Beauty.

C. A. VEASEY, M. D., ON COCAINE PHENATE.

From experiments and cases it seems that the following conclusions are justifiable:

- 1. In cocaine phenate we have a drug that can be successfully used, without producing systemic effect, in those cases in which there exists an idiosyncrasy to the local use of cocaine hydrochlorate.
- 2. As good an anæsthetic effect can be produced with cocaine phenate as with cocaine hydrochlorate, but stronger solutions are required to produce the same degree of anæsthesia.
- 3. The anæsthesia does not come on so quickly with the phenate as with the hydrochlorate, but lasts fully as long, if not longer, than the anæsthesia from the latter.
- 4. In some cases, though there be no physiologic contra-indication to the use of the hydrochlorate, the phenate is to be preferred on account of its antiseptic properties.—*Med. News*, Phil.—[Phenate of cocaine can be obtained from the N. Y. Quin. & Chem. Works, N. Y., who will also supply literature on Von Oefele's cases.]

PIONEER DENTISTS. *

Standing before you probably for the last time in the official relationship we have so long and pleasantly borne towards each other, it is not without a feeling of sadness that I utter the words which precede my retirement from the presidency of your distinguished society.

Mingled with this emotion, however, is a sense of pleasure that I have been permitted to participate in your successful achievements and enjoy with you the rewards you share in common with the workers in every field in which the object of endeavor is to advance humanity to its highest possible plane, and to promote the benign influences that are a part of the world's growth.

Especially satisfactory is it at this time, to view the remarkable progress that has characterized the career of the Dental Association of South Carolina, and not less, that of the kindred associations of other States with which we are intimately identified.

History tells us that dentistry was introduced in the United States by LeMaire, of the French forces which joined our army during the revolutionary war; that the first American dentist was Dr. John Greenwood, of New York, who practiced in 1788; that in 1820 the profession numbered little more than 100; that in 1832 it had increased to only about 300; and in 1844, twelve years afterwards, to 1,400.

The first American Journal of Dental Science appeared in 1839, and the first American Society of Dental Surgeons was organized in 1840. Our own Dental Association came into existence soon after the war, and I do not exagerate in making the statement that it has proved to be one of the most influential and progressive bodies of its kind in the United States.

From South Carolina, a few years ago, went forth an exponent of the dental profession whose name has since become honored in the homes of popes, emperors and princes, and whose individuality gave a prestige to the American practitioner everywhere, whether it be on one continent or another. Other distinguished men have followed in his footsteps, illuminating the pathway of science and shedding lustre upon our Palmetto State.

All honor to these noble pioneers. Beginning their labors when the horizon of the dental profession was comparatively enshrouded

^{*}Retiring address of Dr. C. S. Parick, read before the South Carolina State Dental Association, at Columbia, August 10th, 1893.



in darkness; when there was no rich store of experience to guide them, no dental literature or scientific device, they conceived and laid the foundation on which has been built our schools and colleges.

Vanguards in the march of mind, they became as it were, intellectual backwoodsmen who reclaimed from the idle wilderness, new territories for the exercise of the thoughts and activities of future generations, and the advanced knowledge and ambitious strivings of the young men of to-day exemplify the thoroughness of their work.

Since their time our dental colleges have made many needed reforms in dental education, with the result of a gradual growth to a higher and better interpretation of the phenomena of the various diseases with which we have to deal.

The teeth being an important part of the human economy, unfavorable conditions of the system are as certainly impressed upon these organs as upon any others. Improper food and nutrition, the action of the gastric juice, the functions of the capillaries, the circulation of the blood, the impairment of the nerve centres, -all are so unmistakeable in their results that the successful dentist, in order to fulfill his mission in the highest acceptation of the term, must possess at least the general knowledge of the practicing physician. He must be a good physiognomist, a good physiologist and anatomist. He must know the origin and insertion of every muscle of the face. In short, his art must harmonize with the laws of nature. Hence it is, that our students are growing closer to the medical schools, so close, indeed, that the graduates of our colleges are now sought in respectful consultation by the best physicians and surgeous of the land who have not themselves made our profession a specialty. I congratulate you, my brother members of the South Carolina Dental Association, that you have so greatly contributed to this result.

In old times, the chief business of the dentist was to destroy. The object now is to preserve teeth. The impress of the clumsy mechanic is still among us, pursuing the tenor of his way with reckless regard of the code of ethics, and he will probably remain so long as the charlatan can profit by the ignorance of his dupes.

The true dentist, however, is more than a mechanic. He is a builder who, in creating and adapting new forms, must draw upon the resources of his own mind, since no two cases are absolutely alike. He is also an inventor and scientist who can walk forth upon the industrial world from his workshop or college, as the case may be, and present devices for the remedy of defect or the relief of disease, that were not before known.

Read our dental journals, and, in his able contributions there, you will find how well he illustrates the progress that has characterized every department of our art and his unwavering desire for its perfection. You will see the skilled handiwork of the microscopist, histologist, physiologist, anatomist, chemist, pathologist, botanist and metallurgist; of men, in fact, who have delved in every field of art and science, and brought its resources to bear upon the further development of all that is good and worthy and notable in our profession.

But, gentlemen, I will not detain you longer. It only remains for me to acknowledge with heartfelt gratitude, the unwavering support and unfailing courtesy you have accorded to your retiring president during his term of office. To me, our relationship has been most delightful, and to the hour of my passing away, I shall dwell with serene pleasure upon the memories that have been engendered during our intercourse.

As I turn to the volumes that have been growing page by page, for more than fifty years, I shall realize that when the evening of life will bring with it its lamps, and in their glow I shall see deeply imprinted images.

I am looking in the faces of some among you whom I remember as boys; I see old friends and associates; some are listening to the rustle of the autumn leaves, and waiting for the winter time. I miss the presence of others who have "gone before," and become magnets attracting us to the next world.

The last chapter of every life, with its solemn *finis*, will remain to be written, but until then, I shall continue to labor as citizen and friend, in order that I may retain your esteem and fulfill the the proud obligations devolved upon me as a member of the Dental Association of South Carolina.

THE CREATOR KNOWS.—"Doctor," said the patient, "I believe there is something wrong with my stomach." "Not a bit of it," replied the doctor promptly. "God made your stomach and He knows how to make them. There's something wrong with the stuff you put in it, may be, and something wrong with the way you stuff it in and stamp it down, but your stomach is all right." And immediately the patient discharged him.



MISCELLANEOUS AND SELECTED.

AMERICAN DENTAL ASSOCIATION.

The American Dental Association held its thirty-third annual session in Kindergarten Hall, Chicago, on Saturday, August 12, 1893.

The meeting was called to order at 10:30 A. M. President J. D. Patterson in the chair.

The Executive Committee reported the following resolutions:

WHEREAS, The date of our meeting, which was fixed for August 15, under the expectation that it would immediately precede the opening of the World's Columbian Dental Congress, has been changed because of the change in the date of holding the Congress; therefore.

Resolved, That the unanimous action of the Executive Committee in calling the meeting in advance of the day selected is hereby approved and declared to be legal and binding.

WHEREAS, It has been generally understood by the members that in order that more interest and work should be concentrated in the Congress, the meeting of the association this year should be as nearly as possible of a merely formal character; therefore

Resolved, That the dues for the current year be remitted and the treasurer be instructed to give receipts in such form that a single payment shall cover the dues for the current and the coming year;

Resolved, That the meeting this year be adjourned without any election of officers, as under the constitution the effect of such non-election will be to make all officers elected last year hold over;

Resolved, That all records and transactions of this year be considered as merged in the proceedings for 1894 and so published, in order that in spirit and in name the officers elected last year shall not be considered to have held office and exercised their functions for two sessions;

Resolved, That the treasurer be instructed to pay all properly authenticated bills;

Resolved, That Old Point Comfort be selected as the place of meeting for next year.

The resolutions were considered separately and adopted except that selecting the place of meeting, for which a substitute was passed providing for nomination of places and a ballot. The following places were put in nomination: Old Point Comfort, San Francisco, Niagara Falls, Saratoga Springs, and Lookout Mountain, and as the result of the balloting Old Point Comfort was chosen. The association then adjourned to meet at Old Point Comfort next year.

NATIONAL ASSOCIATION OF DENTAL FACULTIES.

The tenth annual meeting of the National Association of Dental Faculties was held in Kindergarten Hall, Chicago, commencing Thursday, August 10, 1893.

The association was called to order at 11 o'clock A. M., President J. D. Patterson in the chair.

Twenty-two colleges were represented at the first roll-call.

The Ad Interim Committee reported a case in which a student who had attended a full term at one college but had not presented himself for examination at the end of the term, and consequently received no certificate, applied for admission to the advanced grade in another college. Upon the right of the second school to examine such student, without certificate, the committee had ruled that the dean of the second school could exercise his judgment. This decision of the Ad Interim Committee was overruled by the association.

The Ad Interim Committee also reported in relation to a request made by the dean of the Ohio College of Dental Surgery, who desired to be informed "whether a student who regularly completed a course at a recognized college, whose six months' session ended in June, may enter the class of another recognized college the following October as a regular student." The committee had held that such second entry would not be in conformity with the rules of the association. A motion to sustain the committee's ruling was adopted by unanimous vote.

A resolution offered by Dr. Truman restricting to one delegate from each college the privilege of speaking, voting, or acting on committees was adopted.

The Executive Committee reported a recommendation that applications for membership must be indersed by two or more members of the association. The recommendation was adopted. (Takes effect in 1894.)

The application of the Western Dental College of Kansas City, for membership, was again laid over for a year.

At the request of Dr. Carpenter, for a ruling upon the by-law in regard to dissections, the president ruled that the language was mandatory.

Under the call of colleges for reports, Dr. Gorgas, of the University of Maryland, Dental Department, stated that his school had under consideration the adoption of separate lectures for the three classes.

Dr. Morgan reported that Vanderbilt University, Dental Department, had abandoned the preliminary course in September, and instead would give the students a practical course at the end of the session, commencing about the middle of January, the regular term beginning the first of October.

Dr. Sudduth reported that the College of Dentistry, Department of Medicine, University of Minnesota, had adopted as a preliminary course a quiz for conditioned students. They had also changed the degree from "D. D. S." to "D. M. D."

Dr. Goddard, of the University of California, Dental Department, reported that his college had increased the requirements for entrance by adding Latin to the list of studies to be passed in examination. First-course students take also the elements of pharmacy. Each student performs a graded series of experiments in metallurgy, and for the seniors a practical course in orthodontia has been in operation for several year. The sessions commencing this fall will begin the first Monday in September and continue nine months.

The Executive Committee reported applications for membership from the following schools, which under the rules lie over to next year: University of Buffalo, Dental Department; Western Reserve University, Dental Department, of Cleveland.

The resolution offered last year by Dr. Winder, with reference to the admission of graduates in pharmacy to advanced standing, was taken up for action and on a vote was lost.

The resolution on the same subject offered by Dr. Peirce at the last session was then taken up, amended and adopted as follows:

Resolved, That colleges of this association may admit to the junior class graduates of recognized schools of pharmacy, subject to the examination of the freshman year.

The amendment to Article VII. of the constitution offered last year was taken up, and on motion laid on the table.

The following resolution, laid over from last year, was adopted: Resolved, That any college of this association failing to have a representative present for two consecutive years, without satis-

factory explanation, shall be dropped from the roll of membership of the association.

Dr. Sudduth moved that Latin and Physics be added to the list of subjects now required for entrance into the colleges belonging to the National Association of Dental Faculties, with the understanding that a student may take one condition, which must be made up before he will be allowed to take the junior examination. Under the rules this lies over.

The Executive Committee reported favorably upon the application of the Detroit College of Medicine, Dental Department, of Detroit, Mich., and the Homœopathic Hospital College, Dental Department, of Cleveland, O., recommending them for membership. The report was adopted as to the Detroit College, which was thereupon elected to membership. The recommendation with reference to the Homœopathic Hospital College was rejected, and the matter referred back to the committee for further investigation. The committee reported later adversely; the report was adopted and the application was rejected.

The Executive Committee also reported that Howard University, Dental Department, of Washington, D. C., had requested that its application lie over another year.

The Executive Committee reported adversely upon the United States Dental College, and the report was adopted unanimously.

Dr. Morgan offered the following, which lies over one year:

Resolved, That a certificate of attendance from a medical school, to be accepted as the equivalent of one course in dentistry, must show that the student attended at least seventy-five per cent. of a five months' term, and also passed a satisfactory examination in his freshman year.

Dr. Truman, chairman of the special committee appointed to investigate statements made by Dr. Sudduth in a paper before the Academy of Dental Science at Boston, reflecting upon the conduct of certain dental colleges, made a minority report, recommending that Dr. Sudduth be censured for the language used. By a vote of 10 to 12 the recommendation was rejected, most of those voting in the negative stating their belief in the want of jurisdiction by the association.

A communication from the Royal College of Dental Surgeons, Ontario, resigning its membership in the association, was presented by the Executive Committee, and on motion it was ordered that the resignation lie on the table until the next annual meeting, and that the college be requested to send a delegate to the meeting in 1894.

Dr. Hunt moved the repeal of the rule admitting undergraduates in medicine to the junior grade. Laid over.

Dr. Hunt moved that the rule upon the standing of graduates in medicine be amended to read as follows:

"A diploma from a reputable medical college entitles the holder to enter the second or junior grade in colleges of this association, and he may be excused from attendance upon the lectures and examinations upon general anatomy, chemistry, physiology, materia medica, and therapeutics."

Laid over under the rule.

The Executive Committee reported the following resolution, which was adopted:

Resolved, That a committee be appointed to formulate a series of subjects and questions for preliminary examinations and a minimum standard to be reached before admitting students to colleges.

The election of officers resulted as follows: H. A. Smith, Cincinnati, president; C. L. Goddard, San Francisco, vice-president; J. E. Cravens, Indianapolis, secretary; Henry W. Morgan, Nashville, Tenn., treasurer; A. O. Hunt, Iowa City, Ia., J. Taft, Cincinnati, Frank Abbott, New York, Executive Committee; James Truman, Philadelphia, Thos. Fillebrown, Boston, W. H. Eames, St. Louis, Ad Interim Committee.

The newly elected officers were installed, the retiring and incoming presidents each returning thanks briefly and gracefully.

The following committees were appointed:

Committee on Schools—J. A. Follett, chairman; F. J. S. Gorgas, Louis Ottofy, C. N. Peirce, Truman W. Brophy.

Committee on Text-Books—S. H. Guilford, chairman; J. D. Patterson, Thos. Fillebrown, A. O. Hunt, J. Hall Lewis.

Special Committee to Prepare Subjects and Questions for Preliminary Examinations—Francis Peabody, W. Xavier Sudduth, Henry W. Morgan.

Adjourned to meet at the call of the Executive Committee.

The following colleges of the association were represented by the delegates named during the sessions:

Dental College of the University of Michigan-J. Taft.

University of California, Dental Department—C. L. Goddard.

University of Pennsylvania, Dental Department—James Truman.

Chicago College of Dental Surgery-Truman W. Brophy.

Indiana Dental College-J. E. Cravens.

Columbian University, Dental Department—J. Hall Lewis.

Pennsylvania College of Dental Surgery-C. N. Peirce.

State University of Iowa, Dental Department—A. O. Hunt.

New York College of Dentistry-Frank Abbott.

Dental Department of National University-J. Roland Walton.

Northwestern University Deutal School-C. P. Pruyn.

American College of Dental Surgery-Louis Ottofy.

Baltimore College of Dental Surgery-M. Whilldin Foster.

Harvard University, Dental Department-Thomas Fillebrown.

Missouri Dental School-W. H. Eames.

College of Dentistry, Department of Medicine, University of Minnesota—W. Xavier Sudduth.

Louisville College of Dentistry-F. Peabody.

University of Maryland, Dental Department-F. J. S. Gorgas.

School of Dentistry, Meharry Medical Department of Central Tennessee—G. W. Hubbard.

Vanderbilt University, Dental Department—Henry W. Morgan. Kansas City Dental College—J. D. Patterson.

Boston Dental College—J. A. Follett.

Northwestern College of Dental Surgery-B. J. Roberts.

Ohio College of Dental Surgery-H. A. Smith.

Philadelphia Dental College-S. H. Guilford.

Dental Department of Southern Medical College—L. D. Carpenter.

NATIONAL ASSOCIATION OF DENTAL EXAMINERS.

The twelfth annual meeting of the National Association of Dental Examiners was held at the Columbia Dental Club, Chicago, Friday, August 11, commencing at 10 A. M.; the president, Dr. W. E. Magill, in the chair. Owing to the death of Dr. Fred A. Levy, the late secretary, Dr. Edgar Palmer was appointed temporary secretary.

The roll-call of States resulted as follows:

California-J. D. Hodgen.

Indiana-M. H. Chappell, S. T. Kirk.

Kentucky-C. S. Edwards.

Louisiana—Joseph Bowen.

Maine-D. W. Fellows.

New Jersey-G. Carleton Brown, F. C. Barlow.

Ohio-L. E. Custer, James Silcott.

Pennsylvania-C. V. Kratzer, Louis Jack, W. E. Magill.

Tennessee-H. E. Beach, J. Y. Crawford.

Wisconsin-Edgar Palmer.

Massachusetts-J. Searle Hurlbut.

District of Columbia-Williams Donnally, H. B. Noble.

Illinois-C. Stoddard Smith.

Kansas-A. W. Callahan.

Mississippi--W. E. Walker.

The following resolution, laid over at the last annual meeting, was taken up:

Resolved, That it is the sense of the National Association of Dental Examiners, that when a member of the dental profession presents a certificate of registration from a State Board of Dental Examiners, duly created by law, that the same should entitle the holder of such certificate to registration without an additional examination in any State of the Union having a law to regulate the practice of dentistry.

Dr. C. Stoddard Smith offered the following amendment:

Provided, Such certificate was obtained on examination.

The amendment was accepted, and the resolution was then laid over till the next annual meeting.

Reports were received from the following State Boards: Wisconsin, Kentucky, California (verbal), Illinois (verbal), District of Columbia, Maine, Pennsylvania, Massachusetts, Kansas (verbal.)

Dr. Magill reported that there had been additional legislation passed in the State of Pennsylvania, dated June, 1893. (See *Dental Cosmos*, current volume, p. 571.)

Dr. C. G. Edwards said that on account of the difficulty experienced in finding persons to move against illegal practitioners under the old law, the State Board of Kentucky had had another law passed at the recent session of the Legislature, requiring the registration of all practitioners of dentistry, which it was hoped would be enforced. Dr. Edwards also reported that at the recent meeting of the Kentucky State Association a resolution had been passed strongly eondemning the use of secret remedies in dentistry.

Dr. J. Y. Crawford said that he had given much attention during the last nine years to dental legislation, and had submitted propositions to some very good legal authorities. His thought was that laws should be introduced that would be retrospective in their action.

He thought that if the profession in the different States could agree upon what was desirable and draw up a law that would be simple and yet embrace all that was needed to protect the communities, that all of the States would eventually adopt it, and dental legislation would thus be uniform throughout the whole country.

He insisted that the law should be so simple that there could be no chance of misconstruction, and that it should be drawn in conformity with the views of able jurists and intelligent people in other professions. It is not passible to draw up a law that will suit every dentist, but every reputable dentist should be taught that it is his duty to see that the law is enforced, and to assist in detecting those who practice illegally.

Dr. J. D. Hodgen presented and read the amendment to the California law passed at the last session of the Legislature, which provides as a punishment for violation of the law a fine upon conviction of not less than fifty nor more than two hundred dollars, or imprisonment for six months for each offense; half of the fines recovered go to the common school fund of the county in which conviction occurs, and the other half to the informer.

A report from the Committee on Dental Colleges, recommending that it be established as a preliminary condition to the reception of applications to be placed upon the list of recognized colleges be admission to the National Association of Dental Faculties, was adopted.

On motion, it was ordered that applications received at this meeting lie over until next year.

The Committee on Colleges presented its final report, which stated that of the recognized schools for the session of 1892-'93 the number of students was: Freshmen, 1,429; Juniors, 927; Seniors, 433; Graduates, 320; Post Graduates, 44; one school not having reported. Of the unrecognized schools the number of students was: Freshmen, 111; Juniors, 54; Seniors, 22; Graduates, 20.

The committee also reported through its chairman, Dr. Jack, the following list of colleges recognized by the National Association of Dental Examiners as reputable, as reported by the Committee on Colleges for 1893 and 1894:

- 1. Baltimore College of Dental Surgery, Baltimore, Md.
- 2. Boston Dental College, Boston, Mass.
- 3. Chicago College of Dental Surgery, Chicago, Ill.
- 4. College of Dentistry, Department of Medicine, University of Minnesota, Minneapolis, Minn.
- Dental Department, Columbian University, Washington, D. C.
- 6. Dental Department, National University, Washington, D. C.
- 7. Northwestern University Dental School, formerly Dental Department of Northwestern University (University Dental College), Chicago, Ill.

- 8. Dental Department of Southern Medical College, Atlanta, Ga.
- 9. Dental Department of University of Tennessee, Nashville, Tenn.
- 10. Harvard University, Dental Department, Cambridge, Mass.
- 11. Indiana Dental College, Indianapolis, Ind.
- 12. Kansas City Dental College, Kansas City, Mo.
- 13. Louisville College of Dentistry, Louisville, Ky.
- 14. Missouri Dental College, St. Louis, Mo.
- 15. New York College of Dentistry, New York City.
- 16. Northwestern College of Dental Surgery, Chicago, Ill.
- 17. Ohio College of Dental Surgery, Cincinnati, O.
- 18. Pennsylvania College of Dental Surgery, Philadelphia, Pa.
- 19. Philadelphia Dental College, Philadelphia, Pa.
- 20. School of Dentistry of Meharry Medical Department of Central Tennessee College, Nashville, Tenn.
- University of California, Dental Department, San Francisco, Cal.
- 22. University of Iowa, Dental Department, Iowa, City, Ia.
- 23. University of Maryland, Dental Department, Baltimore, Md.
- 24. University of Michigan, Dental Department, Ann Arbor, Mich.
- University of Pennsylvania, Dental Department, Philadelphia, Pa.
- 26. Vanderbilt University, Dental Department, Nashville, Tenn.
- 27. Western Dental College, Kansas City, Mo.

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- 28. Minnesota Hospital College, Dental Department, Minneapolis, Minn. (Merged into No. 4.
- 29. St. Paul Medical College, Dental Department, St. Paul, Minn. (Merged into No. 4.)
- 30. American College of Dental Surgery, Chicago, Ill.

On motion the report of the committee was adopted, and the thanks of the association returned to the committee for their services.

The election of officers for the ensuing year was then proceeded with, resulting as follows: C. Searle Hurlbut, president; M. H. Chappell, vice-president; J. D. Hodgen, secretary and treasurer, 917 Sutter Street, San Francisco, Cal.

Adjourned to the time and place of the next meeting of the American Dental Association.

ODONTOLOGICAL SOCIETY.

The Atlanta Odontological Society organized September 16th, Dr. S. F. Holland, acting chairman. The following officers were elected: Chairman, Dr. B. H. Catching; Secretary, Dr. J. A. Chappel; Treasurer, Dr. J. S. Thompson; Executive Committee, Drs. C. V. Rosser, S. F. Holland and W. G. Brown; Editor, Dr. H. R. Jewett. Dr. S. F. Holland was appointed to read a paper at the next regular meeting, October 15th.

The Society launches out with a full membership, composed of Atlanta's most prominent dentists, and promises great success. The first regular meeting after organization, October 15th, was presided over by Dr. Catchings, whose ability and pleasing manner added much to its success. Dr. S. F. Holland, essayist, read a very ably prepared paper on, Anæsthetics, local and general; their administration and action. Beginning with "the first painless operation, when God caused a deep sleep to come upon Adam to perform the rib operation," he traced the history and use of anæsthetics through the different ages up to the present day.

Chloroform, ether, and nitrous-oxide he regards as the standards, and perfectly harmless when not administered through carelessness or ignorance. Cocaine he regards as the best local anæsthetic now in use by the profession.

The paper was discussed with interest by Drs. Thompson, Frank Holland, Chappel, Hinman, Booser and others.

Dr. Francis Smith was elected president for the next meeting. Dr. J. A. Chappel will present a paper for discussion.

FOR SALE.—Dental office and fixtures of the late Dr. Geo. W. McElhaney, of Columbus, Ga. This is one of the finest opportunities ever presented. Deceased had a large practice and one of the most complete offices in the South. Everything for sale just as he left it. Address M., care SOUTHERN DENTAL JOURNAL AND LUMINARY.

DR. GEO. S. VANN, of Gadsden, Ala., was recently sued in the Circuit Court by Miss Effic Vaughn for \$5,000 damages. The charge was a broken jaw. Dr. Vann won the case. We do not know the particulars, but suppose probably a piece of process came off with a tooth, and some small lawyer about the size of the piece of process, anxious for business, agreed to prosecute the case for half the proceeds.

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OBTUNDING THE SENSIBILITY OF THE DENTINE.*

BY DR. W. C. DAVIS, LINCOLN, NEB.

If we are to eliminate pain from an operation, we should first study its cause and the means by which it is transmitted to the seat of realization.

It cannot be demonstrated that there are any nerve-fibres in the dentine, and it can be demonstrated that the dentinal tubuli are filled with a substance other than nerve-tissue. The dentinal tubuli are far too small to contain the terminal filaments of the sensory nerves, and also the vehicle for the conveyance of blood supply for their sustenance. The nerve tissue cannot live unless it has access to the blood, and it is easily demonstrable that the blood does not enter the dentine. The pulp chamber and root canals are entirely lined with a layer of odontoblasts, each of which is connected with one one or more of the terminal fibers of the sensory nerves. From the odontoblasts, extending out into the dentine, we have processes called the dentinal tubuli. The tubuli are lined with a seemingly non-destructible sheath, and are filled with a fluid, connecting with the odontoblasts. This fluid is protoplasm, not nerve tissue.

In the amœba, which is protoplasm, we find exhibited all the various phenomena of life, also the exhibition of pain. Now it is not difficult to suppose that the protoplasm contained in the dentinal tubuli is similarly capable of transmitting the sensation of irritation to the odontoblasts.

Subject the amœba to chlorid of zinc or carbolic acid, and it will coagulate it. This is true when applied to the dentine. It will coagulate the protoplasm, thus destroying its life and obtunding its sensibility, because we have destroyed the medium through which the sensation is transmitted. This is true of arsenic applied to the dentine, and if the action of arsenic could be limited to the dentine alone, we would in this agent have a perfect obtundent of the sensibility of the dentine. But as its action is not controllable, the death of the pulp follows its use.

In view of the fact that we know the cause of the irritation and the medium by which it is transmitted, and as this medium is not composed of nerve tissue, and as its destruction is not permissible, nor its congulation, owing to the jeopardy to the pulp, it is my theory that the only means by which the dentine will ever be ren-

^{*} Synopsis of paper read before Dental Congress, Chicago, August, 1893.

dered insensible to the surgeon's instruments is by the removal of the protoplasm from the dentinal tubuli. This would of itself be sufficient, were it not for the fact that the dentine is hygroscopic—capable again of taking up moisture; from within by capillary attraction, from without by contact with the atmosphere.

It is therefore my theory, that after the extraction of the protoplasm, we should deposit in its place another substance which is not in itself capable of transmitting sensation. The best means of extracting the protoplasm is the application of some agent not in itself injurious to the dentine or pulp, but which has a great affinity for moisture, of which protoplasm is very largely composed. Absolute alcohol is at once suggested. To assist its chemical affinity for moisture, it had best be applied warm, as heat assists chemical action and also favors evaporation.

If hot air is then applied, it will thoroughly vaporize the alcohol, carrying away the moisture it has extracted from the tubuli, leaving them empty. To whatever distance they have been emptied. to that distance we have destroyed the medium for transmitting pain. In other words we have obtunded the sensibility of the den-The next step is to fill the tubuli with some other substance. I fill the tubuli with a resinous gum in suspension in a volatile oil. Almost any one of the essential oils will answer the purpose, as they are composed of the volatile oils and the resinous gum which we need. Probably nothing works better than oil of cassia, as upon the application of hot air the oils are easily volatilized, and if it has been diluted slightly with alcohol, it will readily go into the tubuli as far as they are empty, leaving its gum to fill the space. To this distance you can excavate with impunity; consequently, the success of the operation will depend upon the thoroughness with which you extract the protoplasm. In teeth of some structure, it seems to be readily extracted to considerable depth; in others it is next to impossible. I do not think the failure of this method in some cases is due to any nerve structure or nerve complication, or nervous idiosyncrasies of the patient, but rather to the anatomical structure of each individual tooth and each individual cavity. For I sometimes find cavities in the same teeth, perhaps one on either side, seemingly the same distance from the pulp. In one it worksperfectly, in the other it is extremely difficult to operate, sometimes meeting with no success. At the same sitting I will find a difference in different teeth in the same mouth.

THE TREATMENT OF INFECTED ROOT-CANALS WITH KALIUM AND NATRIUM.*

BY DR. EMIL SCHREIER, OF VIENNA, AUSTRIA.

I have taken the liberty to request a place on the program of this distinguished body for the reason that I entertain the hope that the subject of my paper is of such importance for daily practice that it cannot fail to arouse the interest of a large proportion of those present. It is my purpose to lay before you a procedure for the antiseptic treatment of infected root-canals, which from its great simplicity and ease of application, as well as on account of the many excellent results which have been obtained therewith, deserves consideration from this distinguished assembly. I refer to the method of treatment introduced by me with kalium-natrium (potassium and sodium).

For the sake of brevity I shall limit myself to developing the principles which underlie the method. Should I succeed in arousing the interest of the audience, discussion will undoubtedly take place, when I shall have the opportunity to express myself more at length upon this subject, which I have thoroughly elaborated. When a tooth with gangrenous or necrotic pulp comes under treatment, the dentist is confronted with the task of removing as far as possible a gelatinous, slightly consistent mass from a capillary tube. and this having been accomplished to introduce into the same canal an antiseptic for purposes of disinfection. You are all aware how much time, patience and skill are necessary for this operation. The average dentist has enough trouble in many cases in simply probing the canal with a delicate needle, not to speak of cleansing, and much less filling the same; he is accordingly compelled to leave out of consideration any thought of saving the tooth. Such cleansing, however, is unnecessary, if it be possible to convert the septic contents of the canal into an aseptic condition, and the operation is much simplified if it be possible to effect the transformation by the simple introduction of a nerve needle.

My method seeks to fill the first indication by a chemical decomposition of the putrescent contents, in which the root-canal serves as a test tube; the second indiction is fulfilled in the development of a substance which is readily taken up by a nerve needle, and sufficiently adhesive for introduction into the canal. This substance

^{*} Translated from German; read before the World's Dental Congress, Chicago, 1803.



which you here see consists of kalium and natrium in a metallic state. I pierce its paraffin stopper with a nerve needle chosen at random. You observe a delicate deposit resembling quicksilver on the needle. I now dip the needle in a glass of water; the needle describes a fiery tract therein. In the root canal in question there exists a putrescent mass. This consists of water and the decomposition product of albumen, the latter consisting especially of fats and fatty acids.

These substances have been formed by the influence of bacteria. and serve as a culture medium for the various species contained therein. If I now introduce my preparation into the canal with the needle, decomposition of the watery contents will occur, with development of a considerable amount of heat. Potassium and sodium hydroxids are formed, which in combination with the fat of the pulp form soap. The characteristic gangrenous odor is accordingly changed into a well-marked soapy smell. A portion of the alkalies possess the well-known property of rendering albuminous substances soluble. Thus any remains of tissue adherent to the walls of the canal are dissolved, the latter becoming macerated, and access to the dentine cananiculi is possible sooner than can be effected by any other method thus far employed. Destruction of the organic contents of these canals is now possible. You will readily understand that in consequence of such destruction the disagreeable discoloration which too frequently occurs, will be absent, and that the lime-salts of the tooth proper are in no wise injuriously affected by the treatment.

The introduction of the potassium and sodium has the additional effect of destroying the bacteria, partly by the heat produced, and partly by the new products formed. The contents of the canal have been transformed into a sterile and probably antiseptic mass, and thus the development of new colonies of bacteria is prevented. Everything has thus been accomplished which precedes permanent filling of the tooth.

A series of questions will no doubt spontaneously arise in your minds which will take form somewhat as follows: Have any particles of the septic contents of the canal been forced through the apical foramen before sterilization has been complete, and so caused infection of the alveoli? Has the destruction of the bacteria been shown to have been certainly accomplished? And finally, does the preparation adhere to the nerve needle sufficiently to be easily transformed to the caual?

It will not be difficult to give a satisfactory answer to all these questions. I hope to have the opportunity of demonstrating my method on the living subject, and you will see how the transmitted mass travels in the direction of least resistance—that is, into the orifice of the canal next the pulp chamber, and wells up alongside of the needle. But the results of practice better than mere theoretical deductions demonstrate the groundlessness of such apprehensions. Reports from various sources are at hand as to the results of the preparation in practice. They are eminently satisfactory. This would be impossible if the infection of the alveoli had occurred in any but the most insignificant proportion of cases. That the bacteria are actually destroyed. I have proven by cultivation experiments, with the full description of which I shall not weary you. Hardly any one would seriously doubt the possibility of the method practiced by me in effecting the destruction of organic life. I shall best succeed in convincing you that the preparation has sufficient consistency to adhere to the needle, by passing it around in actual contact with the needle. I shall probably have an opportunity of expressing myself upon various questions which may be raised in the discussion. It is scarcely necessary for me to state that my plan of treatment should only be practiced with the coffer-dam. In an assembly like this, this fact will appear selfevident. Of course care must be exercised in manipulating with the preparation. With proper care the preparation is free from all danger.

A further question may be raised, whether the methods heretofore employed do not give satisfactory results—that the introduction of a new one is superfluous. I believe that I am entitled to say that the plan of treatment proposed by me is founded upon correct principles, and meets the obvious indications as regards ease and rapidity of application and certainty of result. It is, to say the least, the equal of any method. Every practitioner is in a position by the aid of my preparation to save with rapidity, ease, and wellnigh with certainty, teeth that have been seriously affected, and that without special preliminary preparation and without troublesome appliances. Thus the benefit of treatment of the root becomes possible for the masses. Inasmuch as the preater portion of mankind is forced to lose the teeth for lack of the means of calling in the aid of the dentist at the proper time, I assert that my method marks an important epoch in the progress of root-treatment, and I take the liberty of requesting you to submit the method proposed by me to your distinguished consideration.

DR. E. T. DARBY ON TIN AS A FILLING MATERIAL.

During my college days some members of the faculty said tin would weld, and others said it would not. I took a tooth to my room, cut the crown off, and invested the roots with plaster of Paris, restoring the whole crown to its natural size with tin foil. I polished it up nicely, then took it to one of the professors who questioned the cohesive properties of tin, and said to him, "This tooth has been built up with ropes of tin on two retaining points." He said, "You have melted that tin." I said, "No, sir, I built that up in my room under the eye of some of my college-mates, and it has been done as I said." He expressed surprise. I have kept that tooth, and show it every year as one of the evidences of the cohesive properties of tin.

I have always said that tin was one of the very best filling materials we have. I believe more teeth could be saved with tin than with gold. Whether the tin possesses the antiseptic properties in as great a degree as is claimed by many, I sometimes question, but I do know that tin has a saving quality that we do not always find in gold. The method of combining tin and gold is not used. Dr. Jenkins, of Dreesden, was the first advocate of filling teeth with tin and gold. I have been in the habit of combining tin and gold in some cavities, but I do not see any special advantage in it. I cannot see that the filling is any better by incorporating the gold with the tin. There is but one disadvantage that tin possesses, so far as I am aware, that is its color, but in all approximal cavities that are exposed to view I believe the average dentist will do as well with tin as with gold. I believe if the dental profession would use more tin, they would save more teeth. For children's teeth I know of nothing better for masticating surfaces. A good tin filling will condense upon the masticating surfaces of children's teeth, and I think save them better than anything else. I should use it much oftener than I do if it were not unsightly in the mouth.

Mrs. Mulcahey—Shure, docther, and is it thrue that little Jimmie O'Toole bit yoore termomty into and swallowed the mercury.

Doctor-Yes, my dear madam, it is, and the boy is dead.

Mrs. M.—Shure, docther, an' it were a cold day for Jimmie, poor bye, when the mercury went down.

Doctor—Yes, madam, he died by degrees.—Hot Springs Medical Journal.



THE

Southern Dental Journal and Luminary.

A MONTHLY PUBLICATION

DEVOTED TO THE INTERESTS OF THE PROFESSION.

EDITOR: H. H. JOHNSON, D. D. S.

Contributions, exchanges, books for review and communications relating to the editorial department, should be addressed to Dr. H. H. Johnson, 306 Second St., Macon, Ga. Subscriptions and communications relating to advertisements must be addressed to Drs. W. R. HOLMES & MASON, 556 Mulberry St., Macon, Ga.

Editorial.

RETROSPECTIVE.

The year 1893 is fast drawing to a close, and the New Year will soon dawn upon us. At such a time it is well to take a retrospective view of the events of the last twelve months and see what has been accomplished.

This year has probably marked an era of progress in the profession of dentistry never before equaled in its past history. grand success of the World's Columbian Dental Congress, the largest gathering together of the profession ever known, will be chronicled in the history of this year as an event that will be looked upon for some years with wonder and admiration. The profession is growing, spreading and reaching out into the remotest corners of civilization, and day by day it is with indescribable pleasure that we see it more and more recognized as an indispensable branch of the great healing art. This recognition is forced upon the minds of the people by the great benefits derived from competent service in this line. Recognition comes from competency. Educate the incoming members of the profession, see that they are up to the standard, and soon dental surgeons will be in the army, navy. asylums, and everywhere that a medical staff is required. will all come as a matter of course, without effort, as the march of education, improvement and progress continues. The three years graded course will work wonders on this line.

Looking back and viewing the profession as a whole, much has been accomplished during the year, but as individuals what have we done? Let each one of us ask himself this question. Have we contributed one single idea that will find its way into Catching's Compendium for 1893? I am afraid there are many of us who have not, and if we have originated an idea have we given it to the world, or have we selfishly kept it to ourselves, quite forgetting that we are profiting by thousands of ideas imparted to us by those who have freely given them without even the compensation of thanks from many who have appropriated them. Let us freely receive, but, by all means, as freely give.

If you have originated nothing new, it may be possible that you are in danger of becoming fixed in a rut. Be careful of blindly treading one path until it becomes the only way. This mode of life is decidedly detrimental to progress. Deviate a little, if only occasionally, and see if you cannot find a better way of doing the same thing. Great discoveries have been made by slight deviations from fixed methods. Lastly, reflect over your year's work, and see if you have not made some mistakes that can be avoided in the future, and start out with the determination to make fewer during the coming year. Let improvement be your watchword. Improve your office, your surroundings, your appliances, your methods of practice, and your habits, and you need not fear that your practice will improve of its own accord.

THE ATLANTA DENTAL SOCIETY.

We are glad to note that another effort has been made by some of the progressive members of the profession in Atlanta to organize a permanent local dental society. Several times before societies have been organized there, but generally died out after a brief existence. With the number of good, enterprising dentists now in Atlanta there is no reason why such an organization should not be successfully maintained, and we believe it will be. All petty jeal-ousies and personal feelings should be laid aside, and all unite for the general benefits that will naturally accrue from such an association. There is nothing like unity and harmony in matters pertaining to progress and improvement, and we hope to see the profession in Atlanta brought together through the influence of this

society, and united as one band or brotherhood striving for the attainment of one object—advancement. Selfishness and jealousy are almost insurmountable stumbling blocks directly in the way of professional progress, and we hope to see every particle of it swept from the mind of every progressive dentist in Atlanta, and all soon handed together pulling for the good of the profession. Elsewhere we give a synopsis of the proceedings of their first meeting and a list of officers elected for the first year.

CARBORUNDUM.

"A recent issue of *Invention* contains a short account of this new material. It is composed of carbon and silicon, in proportion of one atom of each to a molecule. The combination of the two elements is brought about by electrical action, and consists of the introduction into a box of clay of an intimate mixture of carbon and sand, into each end of which project one or more rods, or electrodes, of carbon, and through these and the mixture of carbon and sand passes a current of electricity of a sufficient quantity, for the proper length of time, to fuse the mass, and cause the reduction of the contained silicon and its subsequent combination with a portion of the carbon.

"When removed from the furnace the carborundum is in a cinder-like mass, consisting of crystals varying in size. The mass is then treated with acids to remove impurities, washed, dried and crushed, the crystals being then separated in sizes or degrees of fineness. The most unique property of the compound is that by its means one is enabled to cut and polish diamonds, and it seems it is proving a valuable adjunct to the dental office."

As it is used in dentistry this preparation is far superior to corundum stone—cuts faster and may be used wet or dry. Messrs. Lee S. Smith & Sons, of Pittsburgh, Pa., have placed the stones on the market. They may now be procured at dental depots in all the forms in which corundum stones are made.

THOSE double-faced mouth mirrors made by the Wilmington Co. "are very unique and handy. We have used them with great satisfaction.

Now is the time to subscribe.



TO THE MEMBERS OF THE GEORGIA STATE DENTAL SOCIETY.

At the last session the following resolution was passed and adopted:

Resolved, That each member of the several committees appointed to prepare a paper on the different subjects for discussion before the convention shall prepare such paper and forward the same to the Committee on Essays and Voluntary Papers three months before the meeting of the convention at which they are to be read, and that said committee shall have printed fifty copies of each of the same, and distribute them to members of the society who may apply for them before the meeting of the convention.

The next meeting will probably be held in May. Thus it will be seen that to carry out the object of this resolution, and to secure good papers and intelligent discussions thereon, it becomes necessary to get to work at once.

The last meeting was a miserable failure as far as papers were concerned. We had only three short papers, and two of them on one subject.

The members should feel it a *duty* to prepare papers when appointed on committees, or at least to do something to show that they take an interest in the meetings.

Let us get to work at once and have such an array of carefully written papers as has never been seen at one meeting before. There must be no lagging. The next meeting *must* be a grand success.

"Who held the pass of the Thermopylæ against the Persian host?" demanded the teacher. And the editor's boy at the foot of the class said: "Father, I reckon; he holds a pass on every road in the country that runs a passenger train."

MARRIED, on the 12th of October, Dr. W. H. Shine, of Pensacola, Florida, to Mrs. G. P. Gates, of same place. After the ceremony Dr. and Mrs. Shine went on a bridal tour to the World's Fair. Dr. Shine is one of the rising young men of the profession, whose reputation is not bounded by the border lines of the State in which he lives. We wish them unbounded happiness.

Every dentist should subscribe for this journal for 1894.

INVITATION.

Mr. and Mrs. James N. Richardson request your presence at the marriage of their daughter Sallie,

to

J. E. Wyche, D. D. S.,
Wednesday evening, November twenty-ninth,
eighteen hundred and ninety-three,
at eight o'clock,
West Market Street Church,
Greensboro, North Carolina.

The above invitation has recently been received at this office. Dr. Wyche is a courteous and affable gentleman, liked universally by all who know him. He is a graduate of the Baltimore College of Dental Surgery, and the popular Secretary of the North Carolina State Dental Society. We will watch the progress of his professional star with interest and pleasure. Our best wishes attend them.

TO OUR PATRONS.

Volume XII. of the Southern Dental Journal and Luminary closes with this issue. It has been with pleasure and pride that we have noticed the appreciation of our friends and patrons of our efforts to get up a publication which is now recognized and admitted to be the best journal ever published in the South. We wish to assure our friends that this is no mushroom start. Improvement and progress will be our watchword. In this volume we have given our readers nearly a hundred original articles that have not appeared in any other journal, besides the choicest selections culled from other publications. Next year we expect to do more. We already feel the stimulus of encouragement for the New Year, and feel sure of a more prosperous year than the journal has ever known.

Thanking our friends for their favors and encouragement, we respectfully ask a continuation of same. When we again greet you we hope each one will have enjoyed a very happy Christmas.

Commence your subscription with the January number.

"SWEET CHARITY."

In the Artists' Exhibition of 1893, at the New York Academy of Design, there was exhibited an oil painting by J. L. G. Ferris, entitled "Sweet Charity." Its richness of coloring commanded instant attention, while the lesson it taught was so impressive that one naturally returned to it for a second view.

Its subject is a young lady of colonial times who is on an errand to one of the poorer families of the town. She has a sensible, charming face, which expresses with remarkable fidelity the sentiment of her errand. There is not a home that this charming picture will not ornament. It must be seen to be appreciated.

"Sweet Charity" was purchased by the publishers of The Youth's Companion, and has been reproduced in colors in large size, 14\pmu x21.

It will be sent to all new subscribers to *The Companion* who send \$1.75 for a year's subscription, and the paper will also be sent free from the time the subscription is received to January, 1894, and for a full year from that date, to January, 1895. This offer includes the double souvenir numbers published at Thanksgiving, Christmas and New Year's. Address, *The Youth's Companion*, Boston, Mass.

TO SUBSCRIBERS.

We would ask that you renew your subscriptions promptly to enable us to arrange our lists and insure your receiving every number. Those in arrears for this year will confer a favor by settling up, as we wish to close up our old books as soon as possible.

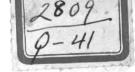
PEROXIDE OF HYDROGEN used in drinking water is said to effectually destroy any cholera or typhoid germs that may be present. The strength advised is about one to one thousand, freshly prepared.

DR. WALTER MAY REW, whose bogus medical college was exposed last July, was sentenced October 10 to three months' imprisonment in the penitentiary. He won't make any mere diplomas for three months, anyway.

Send in your subscription for 1894.

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